A Universal, Geometric Primer and Logic-Sequence Representing all Complex-Systems.



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Abstract

In order for something to be considered *Universal*, it must be shown to do so in all frames of reference. Put forward in this paper is a 'Geometric Primer' that fulfills this qualification and the evidence to support it. Complex-Systems will be explained to be objects that exist at a point that is identifiable in the language of Physics as 'Space/Time.' With the further application of an easy to follow along Logic-Sequence, this paper then separates out the various manifestations that occur, showcasing the relationship between *Space and Time* and how they come consistently come together at this Continuum of Spacetime.

Science already has discovered many of the pieces to the universe but still has many mysteries to explain, including a logical pattern/program for how it all works. This paper bridges that gap. The following pages are not a few and quickly unfold the first series of mysteries by simply explaining two Proof Sets located in two other documents for easy side-by-side comparison. A one-sheet infographic called the **Geometric Proof** which is first unpacked, followed by the **Inverse and Opposite Proof Series**. It is through these two concepts that a Universal Primer will be established in the fields of Math, Physics, Quantum Mechanics, Astronomy, Cosmology, Geology, and Art-Theory. This is PART ONE. PART TWO will expand these concepts into Biology, Psychology, Neurology, and even Computer Science. PART THREE connects further and expounds the concepts from Philosophy, Sociology, Archeology, and Ethics.

To support all readers of any background, this work has been designed around a lesson plan which unpacks each subject on a somewhat basic level. This allows any reader insight into all the basic fields of knowledge needed to understand it without requiring a specialized education. The subjects move quickly as each piece of evidence is already established and simply needs to be shown how it fits into this pattern/ program. Hyperlinks exist in some versions to direct readers to locations for those wanting a deeper subject-matter review on topics that are gleaned over.

There is a lot of information that has to be distilled and certain formatting procedures and illustrations were undertaken to assist readers with metabolizing all of the concepts. The Table of Contents was also designed to be more robust in order to help readers to quickly find topics. A serious approach in reading is still recommended as the equivalent information load is large, making this paper not hard but heavy.

Once established as a Universal Geometric Primer, this paper should be able to answer any and all questions: Why does our Universe look the way it does? Where do we come from? What started our universe? How were matter and energy once one? How does our universe maintain paradoxes? Where does Human Behavior originate? Why do we have left and right hands? Why do computers suffer from The Halting Problem? Why is addiction so prevalent? How do we solve systemic racism? Are there universal ethics for the treatment of people? Is there anything, everyone in the world could eventually agree on? These questions and more will be answered.

Keywords: Theory of Everything; The Halting Problem; Goal of Science; Scientific Discovery; Evidence Based; Geometric Primer; Neurology; Math; Physics; Matter and Energy; parity violation

Special Thanks & Consideration

PART ONE

1.) To my *Inverse* and *Opposite* Mentor, <u>Peter E. Cook</u> who helped me align the Geometric Primer with Big Bang Cosmology, all the particles and the forces.

PART TWO

1.) To my LIFe mentor, Carla.

PART THREE

3.) To my husband, John.

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PART ONE: Introduction Into Complex-Systems

Physics is the field with maybe the most famous and pressing need for a unifying theory, the one between <u>General Relativity</u> and <u>Quantum Mechanics</u>. These include the rules or mechanics of the very small or *Quanta* versus the rules for gravity or the very large which tend to 'act relative to each other' by warping each others space. The science community did not like that there were not just two sets of rules, but Einstein came along and showed that there are three sets with Special Relativity. Each of these sets of math rules worked up to a point but they had limits, which didn't seem to researchers to be apart of the pattern.

Each set of math rules works to make predictable results in a specific Frame of Reference but the How or Why wasn't known. Was one set wrong, somehow, or the other sets right? If something is wrong, does that mean other things are wrong? If all three sets are right, how could these completely different rules exist connected to each other in the same universe? That actually seems like a great question that weirdly no one ever might have asked before. To answer this quandary, only a finite number of researchers believe there must be a unifying concept that hasn't been discovered that will be found to connect them. Keep in mind, though, that this is only one subset group of believers for a unifying Theory of Everything and it contains not all but only a finite number of researchers who are specialized like Theoretical Physicists.

Mathematicians are another group doing this kind of research with again, a finite number believing that only Math and Physics can be unified together. There is a lot of different kinds of Maths being done in Physics and the fact that they use Math to describe Physics seems to further imply something to these researchers; there is interchange already happening. Of this group, not all function with the idea that there is a unification system outside of math and physics but a finite number do.

At this point, if you are a scientist that believes in this concept of unification, the scientific society may label you as a 'Platonist.' The Greek Philosopher Plato stressed 'that actual things are copies of transcendent ideas and that these ideas are the objects of true knowledge apprehended by reminiscence.' From which came the resulting theory that 'the numbers or other abstract objects are objective, timeless entities, independent of the physical world and of the symbols used to represent them.'(1) Countess Ada Lovelace (1815 - 1852) when observing the mechanical Jacquard Loom(2) and thinking of Charles Babbage's (1791 - 1871) Analytical Engine recorded her thoughts to be identical and showed herself to be one of the first to see the potential for computer programing based on the very idea of representation. Indeed, if the first computer program on punch cards can be counted as the first computer/printer, then the Jacquard Loom should be considered 'retro,' by pop culture standards. (Youtube Video: 1803 Jacquard Loom)

There are a finite number scientist and researchers that do believe that there is something that could unify math and physics with biology or other living systems, but again, this isn't everyone, in every field of science. This deserves repeating to point out that the reason why this discovery hasn't been made so far is that only a small subset of specialized groups of people are actually looking for it. And this research is going on in a very narrow corner in which the whole pattern/program would have to be reconstructed from the largest list of unknowns versus knowns. This makes testing harder as well. Testing and peer review of a Theory of Everything must be done by many different fields and all groups will need to trust other experts or do the brain-work of processing all the evidence given.

None of the evidence is fabricated or hard but the quantity of it does make it heavy. This means that every piece of evidence that is presented will be submitted with hyperlinks to supporting background information and context to make sure that every reader, civilian or not, may have a chance to study up on each topic properly, being able to follow along to whichever degree they wish. The evidence is laid out simply but moves quickly which is why the topics are indexed and placed in the Table of Contents.

The use of Wikipedia as a main link source is due to the stability of their webpages and the free cost of their services to the public. They also have no advertising except for their own fundraising. Other links direct readers to youtube videos and other free online content. Please report any links that do become detached to proper sources.

- (1) Bing Dictionary definition used for 'Platonism'
- (2) (Fuegi, J; Francis, J (October–December 2003), "Lovelace & Babbage and the creation of the 1843 'notes'", Annals of the History of Computing, 25 (4): 16–26)

WHAT IS INVERSE AND OPPOSITE?

In this paper, no concept is a figment of the imagination of the author. There might be words or phrase you are unfamiliar with or that are pulled from different fields but without changing their meaning. Second to the phrase Geometric Primer, is another term that is used a lot: Inverse and Opposite. It is this term where we should start because the best way to describe everything that comes out of our universe is by comparing it to all the is Inverse and Opposite to it. This is the symmetry of the universe and mapping out these occurrences gives us our logic-sequence.

What does it mean to have an *Inverse and Opposite* Universe? This concept is everywhere in all the fields of science if you know how to look at it. In the field of maths, there are different definitions and usages and some come nearly to saying it. There is an ability to use the word *Opposite* to directly describe *Inverse*, which is confusing because they seem to have almost the same meaning. And indeed, they are not exactly the same but have one characteristic that is absolutely connected in some way. What is

Inverse may be thought of as one extreme and *Opposite* as the other extreme. Therefore, the term *Inverse* and *Opposite* should translate into the reader's mind as being understood as something existing along a spectrum.

Spectrums

An *Inverse* and *Opposite* universe doesn't imply only one spectrum, it implies two spectrums that are all somehow connected. How do spectrums get connected? The two spectrums just need one shared point or reference frame in which they all evenly extend from. That seems easy enough but what is that one shared-point or reference-frame? Is there such a thing as an Absolute Reference Frame? Indeed, and it will be shown in this paper to be the Geometric Primer. Once detailed, this paper goes on to unpack this universally shared reference frame from which all manifestations may be illustrated along various *Inverse* and *Opposite* Spectrums.

Mathematical Spectrums

You can also think of '*Inverse*' as the exact *reverse* or *reciprocal* of something else. Here's an example in Math-Language for identifying *The Inverse of a Function*:

"A negative exponent is the same as the reciprocal of the positive exponent."

Read the above statement again while working to get your brain to match the words to the symbols in the expression shown here. The negative exponent, $\boldsymbol{\sigma}^{-n}$, may be represented by

negative exponent positive exponent exponent
$$a^{-n} = \frac{1}{a^n} \qquad \frac{1}{a^{-n}} = a^n$$

a positive exponent, a^n , by simply changing the fraction of the negative

exponent to its <u>reciprocal</u>. The word <u>reciprocal</u> is just a formal way of saying <u>Inverse</u>. The way this transformation is allowed to take place implies that they have to be connected or else they shouldn't be able to represent each other. This expression shows the underlying nature of a spectrum with the negative exponent on one end and the positive exponent on the other.

CP-Symmetry

Quantum Mechanics has tried to capture and understand the *Inverse* and *Opposite* in theories but they don't use the term spectrums, instead, they call it symmetry. And there are many symmetry problems. There are some particles that exist perfectly along two intersecting spectrums or a dual mirror symmetry such as Quarks, having different spatial coordinates (Up vs Down-Type) and a parity or mirror image (Antiup vs Antidown.) These types of particles are said to have both Coordinate or C-

Symmetry (this is the Up vs Down part) and Parity or P-Symmetry (which is the Antiup vs Antidown part.) CP is accepted for short. What Quantum Mechanics hasn't been able to answer is why this CP-Symmetry gets violated with other particles. Why are electrons not like this or the hadrons? Why is the universe making something so perfectly symmetrical if everything else isn't also going to manifest in some kind of perfect symmetry? The *Inverse* and *Opposite* is all about understanding that symmetry and this paper will show how that symmetry is never violated, it is only evolving into more complex symmetries.

T-Symmetry

Another type of Quantum Mechanics symmetry is based on **TIME** and is called T-Symmetry. This is the experience of **TIME** in a linear fashion but not all particles obey T-Symmetry. What does this mean? It means certain particles perceive **TIME** as being the same no matter what direction they are going. If you are outside the field of physics this might at first seem to be an absurd statement but there is an easy way to get your mind around it. The way you read words such as this statements is in a linear fashion and when the words are done it's finished unless you go back and read it. How could a sentence be read the same going the opposite direction? Here are two options: the sentence could be constructed as a <u>palindrome</u>, which means the spelling is the same forwards and backwards. The second option would be to build the sentence as an <u>ambigram</u>, whose individual letters are constructed to look the same forwards and backwards. If the series of events occurring in **TIME** is either one of these pattern/programs, then the mystery isn't the violation of T Symmetry, it's the need for a universal pattern/program that allows for the evolution of even **TIME** into more complex symmetrical structures. This paper shows how that is accomplished.

Hubble's Law

Another example of the *Inverse* and *Opposite* is found in <u>Hubble's Law</u> and includes of a set of calculations known as the *Hubble Constant*, *H*₀, which has units that are *Inverse*, called <u>Hubble Time</u>. *Hubble Time* is what is used to calculate how old the Universe should be if events happened *linearly* according to the dynamics laid out by the *Hubble's Constant*. Together, Hubble's Law is accepted as fundamental in describing recessional velocity and distance. You don't have to know all the details to just see that the *Inverse* and *Opposite* concept isn't a new invention. These occurrences and connections have just been apart of the mystery of our universe until now.

Tensors

The *Inverse* and *Opposite* imply two separate but connected realities, similar in one way while being different in all the others. This is how a negative exponent was able to become a positive exponent; they must have one point in common to flip flop around. In Calculus, this also describes how <u>Tensors</u> work. Tensors represent a fixed

relationship between two <u>vectors</u> so they may be thought of as trying to capture what is happening at the point in which two vectors intersect.

Paradoxes

Spectrums also help us understand other questions such as How is our universe able to sustain paradoxes? This question is easily answered by the *Inverse and Opposite* model. Paradoxes exist as endpoints to spectrums which are also where particles and other higher Complex-Systems evolve out from. The endpoints of spectrums are stabilizing events allowing for randomized evolution. Paradoxes will constantly be shown in this paper to not be mysterious phenomenon but expected and required outcomes.

Entropy and Evolution

What other spectrums are there? Evolution may also be seen as the growing, combining force but it is balanced by Entropy. Entropy should be seen as something more than a destructive force and has been recognized and defined by statistical mechanics as being a crucial part of all There concepts are very important to an Inverse and Opposite model that experiences both evolution and entropy. These terms hold many meanings and will receive some additional explanations so all readers may share in this universe of information.

Entropy had a long historical usage but was furthered defined by <u>Ludwig</u>
<u>Boltzmann</u> (1844 - 1906). Boltzmann was most famous for defining the Kinetic Theory of Gases where he directly compared the Laws of Thermodynamics to the constant random motion of the underlying particles. Before Boltzmann, entropy was only considered to be the proportion of energy in a system that may result in measurable *work*. They didn't know where that work was coming from or why. Gases were though to be a mysterious substance potentially made of <u>Aether</u> not tiny particles simply moving around.

Entropy began to be understood to imply that everything in our universe would be striving for Thermodynamic Equilibrium. This is where the temperature and pressure become the same, causing there to be no measurable work and thus a zero-entropy state would be achieved. It is only when different regions of variant equilibrium come into contact that one is made to react comparable to the other. Entropy, therefore, is just the measurement of how far away any system is, not from complete destruction, but from complete deconstruction resulting in uniformity.

Boltzmann uncovered that entropy was related to the *Specialness* of a system. He also clarified that the more deconstruction a system had undergone as it moves closer to equilibrium, the more it would be exposed to entropic forces. The would help establish the second law of thermodynamics which at Boltzmann's time was still in its early understanding and was only accepted as an axiom.

The measurement of what is happening *Inverse* and *Opposite* to Entropy is called Evolution. These ideas started to be expressed by <u>Charles Darwin</u> (1809 - 1882) who didn't actually write a book called <u>On the Origin of Species</u> as much as a very long Abstract that was published in lieu of a finished scientific report. The difference is that *On the Origin of Species* gives one example after another, showcasing how nature was statistically selecting those that would survive best. Darwin never offered an explanation for why nature behaved in this way, this was a new concept and the mechanism wasn't uncovered. But it was there, the evidence was endless. Before evolution, a concept called <u>Spontaneous Generation</u> was accepted which is now considered an obsolete body of thought.

Evolution and entropy are automatic results of the pattern/program shown in this paper and their use as tools in the cosmology of the universe are made manifest throughout. There are further spectrums:

Imaginary Numbers and Real Numbers.

Energy and Matter.

The Quantum World and a Physical World.

What is the point where all these concepts connect together? It turns out, everything is connected at the point which is the Geometric Primer. The resulting manifestations from this single-engine are all of the *Inverse* and *Opposite* Spectrums manifesting before our eyes. In order to better comprehend the *Inverse* and *Opposite*, understanding the Geometric Primer is crucial. To assist with this process a **Geometric Proof** for the Geometric primer was created.

The Geometric Primer, by itself, is very simple and not hard to comprehend but it does require the correct universe of information to get it *Spinning* and replicating. Deep questions into the origin and behavior of the Geometric Primer sets this paper up for a linear explanation. It is not enough to know that a Geometric Primer exists but how it evolves and what kind of work it is doing. All of these details are represented geometrically in the **Geometric Proof**.

Created as separate documents to make them easier for side by side comparison, have ready the **Geometric Proof** first, followed by the **Inverse and Opposite Proof Series**. These will be your visual guides and the basis to PART ONE of the Universal, Geometric Primer and Logic-Sequence for all Complex-Systems.

GEOMETRIC PROOF

The **Geometric Proof** contains the visual geometric patterns and is an independent document which you'll want to pull up and have side by side with this detailed explanation. Ready to go?

There are three sets of images, each with their own specific details on how each part works. There is also a synopsis off to the side linking these geometric constructs to the terms put forth in antiquity that have been striving to describe them. The only thing that this paper contributes is the skill of drawing visualizing lines that showcase the operating structure of the Geometric Primer with a few relatable explanations. All the evidence laid out along the Geometric Primer in this paper was already discovered, uncovered, or laid out by someone who is published and established as credible. The Geometric Primer is the manifold that brings all of the mysteries into the domain of comprehensible.

IMAGE ONE

Absolute Space

The first image, starting at the top of the page, has the formula **E = mc²** referenced above it. This image represents the *Quantum Realm* or according to <u>Isaac Newton</u> (1642-1727), **"Absolute Space**." Newton described **Absolute Space** as:

'The reference frame against which the motion of the body in space is to be measured.'

What is that reference frame? If the *motion of the body* is a measurement of what the *mass* is doing, then the reference frame would be *where the mass is evolving or coming from*.

$E = mc^2$

A hint is also in Einstein's formula. What $\mathbf{E} = \mathbf{mc^2}$ is actually doing, in a pragmatic sense, is calculating how much radiant energy would be released if all the atoms in your body were to come into contact with their antiparticles and self-annihilate completely into gamma rays. In math and physics, this results from a mechanism known as entropy or decomposition. This formula expresses to the world that matter is directly connected to energy. And it is through some framework where energy gains the capacity to evolve into the *matter* that Newton was referring. It might seem like just an obvious way to rephrase a quote but the additional details in Image One will clarify what Newton didn't know: what the *Reference Frame* would look like.

Dimensions

Historically and contrary to this current **Geometric Proof**, it is suggested that space might only consist of three dimensions with the concept of **TIME**, somehow, as a fourth dimension. These concepts are all mathematical, meaning no one could really draw these ideas out in any meaningful way which contributed to the underlying

difficulties in teaching Maths. It is conceded by this paper that this concept, as it is known, is somewhat true.

TIME, as science current knows it, isn't understood enough to continue this story. What was being observed and measured was correct but being that it was fractal, different variations are not always seen as pieces in a bigger picture. There are three different dimensions in the lower set, (1, 2, 3) and these do evolve but it isn't into **TIME**, it's simply into a 4th-Dimension. There is a lower set of dimensions (1, 2, 3) and a higher set (4, 5, 6). The 7th-Dimension reaches a new evolutionary milestone and exists in a new reality as a 1st-Dimension, resetting the above dimensional-processing.

Directing your attention back to the first image, do you see the rows labeled FLAT, SIDE and TOP? The FLAT is the view for objects evolving in the lower dimensions and are drawn more flat. The SIDE and TOP views are for those objects evolving in the higher dimensions which are more round. The columns are numbered underneath with horizontal arrows to imply the evolution, each stage being a new dimension made from dimensions below. There are extra arrows between dimensions 3 to 4 and 6 to 7. These are special barriers that indicate something special has occurred that gives rise to bonus characteristics.

Underneath Image One are the named descriptions of each dimension lined up in a way to show their underlying pattern. They are also shown here:

Do you see the similarities? The first three dimensions (1, 2, 3) are the lower dimensions. The next three (4, 5, 6) are the higher dimensions but they are similar. The higher dimensions are just more complex versions of the lower dimensions. The last dimension (7) is a Complex-System and creates a whole new reality of dimensions with *it*, the former 7th-Dimension now the 1st-Dimension in a new reality. Make sure you can internally-process that before continuing because this 'nesting' comes back up.

It might now be apparent to some readers where a 1st-Dimensional Singularity comes from. Just explained, it is a Complex-System coming into a higher dimension. What kind of *higher* dimension may a Singularity open into? That would be an Empty-Dimension, a topic this paper explores in the upcoming section called **Planck Day Zero**.

Does this imply that a 2nd-Dimension, which is a Binary Couplet, is made from two Singularities? It most certainly does but the reader will need to be careful and not think of a Singularity as just an object. It can also describe a singular system or some object that is now in motion. It could even describe the relationship between singular

movements, it will depend on what else is going on. The 3rd-Dimension is made of Trinary Sets which can then be made up of any combination of Binary Couplets and Singularities. The embedded nature of our reality is thus being shown to manifest in this geometry.

DNA

There is a great real-world example that every person reading this paper has access to in order to verify this sequence. Depending on immediate accessibility, hold out both your hands in front of you and touch your index or pointer finger to its opposed thumb. Now, extend your other three fingers out on each and there you have it. Do you see it? Each hand is a made up of a Binary Couplet and a Trinary Set, each of which further ends in sets singularities. The *Inverse* and *Opposite* is further being manifested in the left and right mirror images of the hands. It is harder to see this in feet but the sequence is easily modified to fit. If accepted, this pattern/program would explain how DNA, a simple set of self-replicating instructions, ties off the fractal patterns when creating organic Complex-Systems from basically an organic computer-tape.

'Crossing-over' into the higher dimensions implies the evolution of something that isn't just new but modified. This isn't the major transformation occurring for the 7th-Dimension but a minor one and so a bonus characteristic is gained. For energetic particles, this might mean gaining *mass* from internal <u>Fluxes</u> and from interactions with the Higgs Field (<u>Youtube introduction video on the Higgs</u>). The higher dimensions have also been described as being more evolved versions of the lower dimensions. The higher dimensions consisting of yet more complex evolutions resulting in Complex Singularities, Complex Doublets, Complex Triplets, and then Complex-Systems.

Action-States

A Complex Doublet isn't an object, per se, but an action-state, similar to the change-potential in the lower dimensions for Binary Couplets. Instead of being an outward transformation undergone by the Binary Couplet in the lower dimension, though, there is a more complex internal movement or reorganization happening in the higher dimension. What is the use of these action-states? They represent this model's overall ability to make transformative leaps. Think of the environments needed for fusion or fission to take place, the amount of heat and pressure that are required, each feeding into the other, building into a cycle until finally evolving a particle that is something new and heavier. It is Complex Triplets takes these transformations a step further by expressing how the very environment itself is affected by Complex Doublets.

7th-Dimensional Complex-System

The 7th-Dimension describes an already existing Complex-System created by all the underlying, lower-dimensional activities. It is a combination of six of the higher 6-Dimensional Complex Triplets. This transformation establishes an additional bonus

'object' which is a unique binary characteristic located in a region solely at its central core. The bonus *Aspect* received by the 7th-Dimensional Complex-System is different than the one received when going from the 3rd- to 4th-Dimension. These bonus *Aspects* will receive more explanation in future sections but what you need to remember is that there now exists a new Complex-System, with some kind of internal stability. As a Complex-System, it is now bigger or more complex than anything else beneath or before it. As mentioned previously, this allows Complex-Systems to enter yet another Empty-Dimension to exist there as the lowest dimension. Thus you can imply that this 7th-Dimensional Complex-System is experiencing its own different and unique version of reality, something *Inverse* and *Opposite* to what is going on embedded within.

How does all of this add up to seven dimensions? The term and rules are borrowed but if you aren't a math student, teacher or enthusiast, then it may not have stood out to you. 'Dimensions' are just what happens to be established when you add an additional *character* in a sequence. Yes, *Dimensions* do go on to become more complex things but they manifest from this, their simplest form.

Looking back at Image One and considering all of the individual images that define the geometric shape of the first six dimensions (1, 2, 3, 4, 5, 6), the individual images themselves might look familiar to art majors. These were also borrowed and not invented for this paper. There is a lot of math in art theory but it still takes an expert artist who is also an expert teacher to give you a proper rendering of the Theory of Perspective. This paper relies upon an online source provided for free from the world-renowned spherical artist named Dick Termes out of Spearfish, South Dakota. On his website, he explains 6-Point-Perspective with nearly identical example images and with additional mathematical explanations for what is the defining interpretation of 'Perspective' for all Visual Arts.

With his permission, Master Termes' content is reused as the conclusion to PART ONE. It's available online now if people want to stop, read up and compare or jump ahead to the end.

CAUSAL LOOP and process

Lastly, the reader might be wondering what is so fancy and exciting about this 7th-Dimension? You're going to find out next but we need to review some history quickly first. Isaac Newton wanted a reference frame and Image One gives it: a geometric spectrum of entropy. Another way to view Image One is as 'Quantum-Processing,' which can be defined by the underlying, embedded cooperative relationships. These relationships allow **Absolute Space** to evolve **CAUSAL LOOP**'s and the lesser *process*, an important tool for creating more Complex-Systems in an *Inverse* and *Opposite* Universe. These crucial roles will be illustrated in the *Inverse* and *Opposite* **Proof Series**

IMAGE TWO

Space/Time - Continuum

Reviewing the **Geometric Proof** again, the second image is an image of the 7th-Dimensional Complex-System but drawn with a little bit more detail. Again, this is a rendering of a Complex-System as a Geometric Primer and is this papers main contribution.

Image One is labeled **Absolute Space** while Image Three is labeled **Absolute Time**. While these were described by Isaac Newton it was <u>Hermann Minkowski</u> (1864-1909) and his student Albert Einstein that tried to describe where these two ideas could meet. Where might the two concepts of Space and Time come together? They meet at what Minkowski and Einstein termed but the Star Trek franchise made famous: the Space/Time (Continuum.) By very definition, it was to be 'a mathematical model that joins space and time.' Kind of obvious as statements go, but there it is. The Geometric Primer is about what is obvious, after all.

The Geometric Primer is a mathematical model that joins space and time. How? That is a reasonable question. Image Two will help the reader see it as well. Looking at the whole second image, **TIME** is represented by the little circle on the equator of the sphere. There are two arrows within that circle which indicate that this smaller circle can go in two directions along the path of the equator, either forward or backward.



SPACE is indicated by the central node of the sphere and as previously mentioned, it is the extra binary 'space' that is created when six times 6th-Dimensions evolve together. Those former six-dimensional objects are now embedded and get a name change, becoming *Aspects* of a new Complex-System. This is arbitrary and used to help clarify events as this is a dimensional-object created with dimensions. It is easier to call these embedded dimensions by different titles based on what they are doing or controlling.



This Complex-System is going to have all the other lower dimensions structures manifested somehow within its whole structure so let's point them out on the second image.



Binary Couplet arranged into two interlocked Trinary Sets, acting as a Singularity.

The embedded dimensions or *Aspects* are evenly spaced along the equator, so 60 degrees apart, with three on 'top' and three on the 'bottom.' The *Aspects* are represented by the point where lines come into contact at the equator. If you look at Image Two or the this simplified model here, three of the *Aspects* connect upward to one

pole and the other three *Aspects* connect downward, to the opposite pole. Do you visually recognize the pattern/program of a Binary Couplet of Trinary Sets coming together to make a Singularity? It's all there at the same time if you unpack it carefully.

TIME, which moves back and forth, is acting as a Complex Doublet. **SPACE**, which is a manifesting a binary-processing which is another kind of Complex Doublet. There are two Complex Triplets, or databases, which are the collection areas for the two poles. It's all in there, perfectly and symmetrically arranged.

The Four Forces

What else is going on in our universe? We know for instance that we have four forces and they are currently classified as The Strong Nuclear Force, The Weak Nuclear Force, The Electromagnetic Force, and The Gravitational Force. These are represented within the model by the four colored bands as seen within the detailed sphere of Image Two. The colors are intentionally made thicker coming from one of the equatorial *Aspects*. The colors Red, Yellow, Blue, and Green, were used to align how these forces are manifested in various dimensions. Notice how the colored bands are thicker coming from one *Aspect* before it crosses into the Central Node or rather, into **Absolute Space**. The colors then extend out with thinner lines of the same color to the other five equatorial *Aspects*. Can you see the distinction coming from the one *Aspect*? The origination of these forces depends only now on the initial frame of reference.

Can you work out what might also be represented with the thickness difference in the color bands? It's a shadow characteristic from the quantum realm: the thicker bands represent the lower dimensions (1, 2, 3) where the forces are stronger or more prevalent. Once they cross a limit barrier, these forces may be diverted in limited quantities as received by the higher dimensions (4, 5, 6). It is the pairing of these basic forces that turn a lot of energy into a tiny spec matter in the potential zone that is **Absolute Space** and here that concept is manifested in geometric form.

The Unknown

What is immediately outside this Geometric Primer? Blackness. The universe that we are in is predicted by the logic of this model to only be able to create variations of itself, constantly embedded itself based on this same pattern. But if you don't see the whole pattern/program, there are things you will never be able to work out. Are there rules when no one is there to make observations? Absolutely. The <u>potential</u> will be shown to the reader to mathematical always exists, so if no one is watching, that doesn't matter. That is why this geometric structure is called a *primer* and not just a *manifold* or *engine*. It doesn't rely upon anything else to make it work other than fuel. What does and may exist is only classified as 'unknown' until it can be shown to be aligned with the Geometric Primer. The reader may know it formally as 'unknown but don't panic,' as logic exists in our universe to decode the mysteries. What you can't see or touch you can deduce with logic through interactions that have left evidence. It's not

as if there are *things* that are unknowable; there just exists a **TIME** in which the inhabitants of this universe wouldn't know everything.

A better question might be to ask what would be *Inverse* and *Opposite* to this Geometric Primer? Anything outside this system, manifesting in our universe, might then be described without bias as being 'weird' or 'outer-worldly.' It is only after placing all the pieces together for what we know of as OUR *Inverse* and *Opposite* reality, that this seemingly philosophical question becomes answerable by simply making a list of physical characteristics that are *Inverse* and *Opposite* to what we should now know. It's an interesting thought-experiment and the preliminary logic-sequence needed to unpack that concept is put forth. More details about our universe need to first be understood.

Internal Logic-Sequence

The Second Image has several identifies including been called a 7th-Dimensional Complex-System while at other instances, this paper refers to it as a Geometric Primer. What is a Geometric Primer exactly? You can think of a Geometric Primer as the visual pattern/program for a Complex-System. Need something more simple? Think of it this way: The relationships between the lines of the geometry are implying how the *Aspects* interact as a new homogenous unit. A Universal System would, therefore also have a self-manifested visual reality since we have that for other fields. That is what the geometry may be shown to be after all: the visual manifestation of real mathematical concepts. The connection was only implied lightly before but this Geometric Primer allows for the connection to the concept of manifestations to be seen as the obvious answer.

Query Function

Complex-Systems must also be self-sustaining, and evolve the ability to take measurements of themselves and their surrounding reality. They must be able to make predictions in order to survive and continue their evolution. The Geometric Primer split into poles is the first indication of how this workload might be divided for the sphere. One half of the sphere is able to focus on the internal functions of the Complex-System or the internal-outgoing signals. The other half of the sphere is set to review the new external-incoming data sets. Each *Aspect* utilizes its difference and renders meaning through its own dimensional-understanding, by taking one of three basic status checks: outside, parameter, or inside. Then it begins to submit checksums to its applicable database. To add more computer terms, this function is similar to the information retrieval procedure in computing called 'running a Query.'

The Central Node

The Central Node or **SPACE** is not running *queries* but instead has a 'binary check-sum' that is simply identifying if incoming data matches to previously accepted data points. **SPACE** has a sense for all the signals and gives a 'thumbs up' or 'thumbs

down' response to any data created or collected. **SPACE** sits at a strategic point where it has access to all the incoming data, previous data and new data being made. It can't, however, make any changes to the data. Only *Aspects* create or change data points, **SPACE** only *reads* them.

TIME as a Programmer

The **TIME** function is doing something similar to **SPACE** but it has to run along the equator and is coming into contact with the *Aspects* in due course. This allows for **TIME** to have access and the ability to make adjustments to previous data points while **SPACE** works to identify and alert the system to data points that shouldn't be accepted or need further review. The **TIME** *Aspect* functions *Inverse* and *Opposite* to **SPACE** and can be seen as a group of *Aspects* working as a single Programmer for the system. **SPACE** is merely the checksum.

Future sections will be using the same pattern/program but changing out the words. This is how the Geometric Primer is able to answer the questions of *LIFE* such as 'What is Human Consciousness?' These are answered by simply mapping those concepts onto this Geometric Primer with the understanding of the geometric rules listed above. **SPACE** and **TIME** easily slide into new roles without ever-changing these core characteristics.

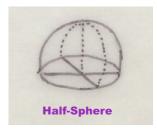
Absolute Reference Frame

Image Two is the combination of Absolute Space and Absolute Time, creating an area of Absolute Space/Time. Another way to state this is to call it the Absolute Reference Frame. Each individual on this planet has a separate and individual reference frame from which they perceive information. Each individual has their own different Reference Frame but how each of those individuals works with the information is the same. That would be the Absolute Reference Frame for our Humans Process information. How the universe processes information would be done with an Absolute Reference Frame. An Absolute Reference Frame offers a lot to Humanity which mostly studies the past or makes predictions about the future in an environment similar to a vacuum. Individuals can't know what they don't know but an Absolute Reference Frame would be like giving them a map.

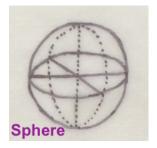
Riemann Zeta Function

As this Geometric Primer represents all Complex-Systems and the overall pattern/program has the same concepts manifested into the different realities or fields, it was easy to predict that this geometric structure would have an algebraic manifestation. There is a function that is famously known for being able to make all Number Systems including a prime-set. Number sequences are just a kind of Complex-System and as this Geometric Primer is capable of creating any Complex-System, an algebraic function

should manifest with the same capabilities. The algebraic form is $\frac{\pi^2}{6}$ and it is known as the Riemann Zeta Function.



It helps to look at the symbols for π²/6 itself as they seem to describe the 7th-Dimensional Complex-System. If you look back at the first image of the **Geometric Proof**, towards the column of objects labeled **5**, these reference objects in the 5th-Dimension which are geometric half-



spheres in the higher set of dimensions. Where there is a circle, there is π so the half-sphere is represented by π . Sticking two of the 5th-Dimensional objects together to represent the π^2 evolves the 6th-Dimensional object. Therefore, $\pi^2/6$ is another way of interfering the 7th-Dimension by describing what is inside it: six total π^2 's.

If the Riemann Zeta Function is a parallel manifestation of this pattern/program this paper would allow the Geometric Primer to answer some of the mysteries like what is the underlying symmetry of the Zeta Function trying to express? Why do the complex numbers have their 0-origins points represented on the grid at the point ½?

There is symmetry to everything, as the term Universal used in this paper titles first implied, so where would the 0 and 1 points exist in a Universal Primer as well as a Universal function? Thinking on Rational Numbers: an Additive Inverse and Multiplicative Inverse have overall goals to attain identities equal to 0 or 1, respectively. This is an Inverse and Opposite spectrum that is made manifested and helps anchor these math concepts to ones connected to the Geometric Primer.

For the Geometric Primer, the 0 and 1 regions are called the areas of **Absolute Space** and **Absolute Time**. As you will read with the third image on the **Geometric Proof**, **Absolute Time** acts according to the same constraints as the *Additive Inverse*, meaning that all the maths needed to make all of these dimensions is simply addition or subtraction. When trying to get to **Absolute Time's** 0-origin point, there just so happens to be other variables in the formula that are taken into consideration so that all the 0-origin points exist as either negative, even integers (manifesting hidden positive binary potential) or at the ½ mark of the number line (the moment when **Absolute Time** begins to become affected by **Absolute Space** and vice versa.) **Absolute Space** acts according to rules similar to the *Multiplicative Inverse*, compounding actions until objects are evolved into a higher made 1. All complex numbers in the Zeta Function come after 1 and indeed, after the initial coming together of **Absolute Space** and **Absolute Time**, all complex numbers are represented visually by the Zeta Function.

There is also the *Unknown* section of the Geometric Primer and the Zeta Function has a whole arena that is unknown but can be implied by simply extending rules into uncharted areas. This topic and set of rules are known as <u>Differential</u> Geometry. When you do the Reimann Zeta Function you have to use geometric

topology to fill in the missing information for data points that may be assumed but can't be calculated. You can't arrive at these points with standard mathematics but you can follow rules that imply where they could be.

IMAGE THREE

Absolute Time

The last image of the **Geometric Proof** Isaac Newton called **Absolute Time**, describing it as:

"flowing uniformly on, without regard to anything external and which enables unique data to be assigned to every event."

This expresses the Master/Slave relationship inherent in General Relativity and further, the true concept of **TIME**. The concept of **TIME** in the second image shows that there is potential for movement in two directions but that movement gets translated in a number of different ways. The 7th-Dimensional Complex-System therefore has it's own form of movement and this might also be thought of simply as its ability to *Spin*.

There is a formula that best fits the definition listed above in the form of another reference formula, this one being for the measurement of something *Spinning*. Newton even calls for it in his explanation of **Absolute Space**, calling it the *motion of the body*. For this the modified formula for calculating the rotational kinetic energy of a sphere fits perfectly. The full formula is reviewed in future PART TWO to show its full unpacked expression. The modified formula is just simplified and works very cleanly within the model for these purposes.

K.E.= $\frac{1}{2}$ | w^2

The formula for measuring the total rotational kinetic energy, K.E., of a *Spinning* sphere is K.E. = $\frac{1}{2}$ I w^2 . It reads, "The Total Kinetic Energy equals one-half times the <u>Inertia</u>, I, times the <u>Angular Velocity</u> Squared, w^2 ." What does that mean in practical terms? Inertia is the sum of the mass and the radius-squared, which may be interpreted to be the spheres physical characteristics. It is easier to think of *Inertia* logically, as simply what an object or system has going for it. Angular Velocity Squared is similar to π^2 , in that the math is referring to two lower dimensions combining together to evolve a higher dimension. Angular Velocity Squared is really what that sphere has done to itself over time. Logically, w^2 can be reduced in concept down to the *active-processing condition of a sphere*.

It is by comparing one **TIME** event to another **TIME** event data is able to be gleaned. The Kinetic Energy Formula is there to measure the result of an accumulation of these embedded data points since that is part of total active-processing condition that

is ongoing. Interestingly, this formula in the context of an *Inverse* and *Opposite* Universe implies that our universe does not directly have a limit on evolution. This is one of the reasons why the universe contains paradoxes or extremes. One example of an unchecked evolution that this universe creates are black holes. It is only recently that the various <u>Caltech LIGO</u>'s teams around the world have started receiving acceptance for their work in detecting that even such extremes do exist.

The events in **TIME** are understood to be aligned according to a Master/Slave model, this being what is *absolute* about them. The *Inverse and Opposite* **SPACE** or Quantum Realm, in turn, maintains Cooperative Relationship Models across *absolute* distances. This is why in the third image, each embedded dimension is represented as a full Geometric Primer. The full catalog of dimensional systems and objects may exist at each dimension.

You've been instructed to think of the formula $\mathbf{E} = \mathbf{mc^2}$ as the way to measure the total *Radiant* Energy of an object. The Inverse to that idea is the formula for *Kinetic* Energy. The connection of these two different formulas represent the three directions any Complex-System, manifested also by the Zeta function, may take: A path towards evolution with a potential for over-centrism, a middle sweet spot allowing for even higher Complex-Systems to be created, or an extreme entropic potential for self-annihilation. Two different formula's, one for evolution and another for entropy connected by a third function that is capable of maintaining and evolving further Complex-Systems. That's our universe in one nutshell.

Einsteins Field Equations

There is another similar 'nutshell' that almost seems a throw-back to this idea. It happens to be <u>Einstein's Field Equations</u>, shortened to **EFE**. If you are new to this subject understand that even though it sounds like you should be seeing multiple equations the plural part comes from the embedded math going on underneath each term. Thus, this paper will be posting one equation. It's going to look really confusing at first but there is an easy way to unpack it so don't panic. Ready? Here it is:

$$R_{\mu\nu} - \frac{1}{2}g_{\mu\nu} R + g_{\mu\nu}\Lambda = \frac{8\pi G}{c^4}T_{\mu\nu}$$

If you would like a proper breakdown of all the underlying formulas I recommend watching any tutorial. (This is a link for an example.) This formula explains in math terms how *mass* makes space curve while also showing how curved-space gives things mass. It is the differentiate calculation representing the relationship of the universe. As **TIME** evolves mass, **SPACE** evolves to curve around it.

An element of Einstein's formula is normally left out so adding it back in is just **E** = (gamma) mc². This gamma function is a binary element that corrects for occurrences at the 0-point. Indeed, both sides of the **EFE** also get a balance function, with others getting tucked into the various embedded differential equations. In calculus, it is something that each new *dimension* gets on top of the sum of everything from the lower dimensions going into it. Einstein's formula is more extrapolated, building each *dimension* from things called <u>scalars</u> to vectors and then up various levels of tensors but the pattern/program of characteristics are the same. Indeed, Einstein had a unifying formula for mass and energy, he just didn't know how it fit into the whole picture.

After the -½ there is a G with some subscript. This device is called the Metric Tensor. The Metric Tensor is times R, which is called the Scalar Curvature. The Metric Tensor defines notions such as distance, volume, curvature, angles, the past, and even the future. The Scalar Curvature relates to the curvature of space around that matter. This part of the function is times another R but this time with some more subscript. This is the Ricci Curvature Tensor. This defines how space curves depending on the mass.

The last unexplained notation on the left side of the equation is an additional Metric Tensor *times* Einstein's <u>Cosmological Constant</u>, represented by the Greek letter *Lambda*. As with *Gamma*, this balances the equation and works to account for the constant inflation.

The right side of the **EFE** has matter defined by the large fraction which represented Gravity and the speed of light in a vacuum. The last symbol was the <u>Stress-Energy Momentum Tensor</u> and it is there to balance the effects such as density, energy flux and momentum in space. For Einstein, it was this side of the equation that was the source and explanation for the Gravitational Field.

While it is a lot of back and forth balancing, Einstein was trying to capture the fractal embedded aspects of our physical universe in a strictly mathematical sense. This isn't easy to do without a guide and it requires precision to follow. Our universe is nothing but manifestations of this fractal-generating *Inverse* and *Opposite* reality and it is easy to get lost. A set of map or visual guide was therefore designed to help the reader keep all of it straight and will be explained next in the next deep dive of this journey.

INVERSE AND OPPOSITE PROOF SERIES

The Major and Minor KEY Series

Modern Minor KEY

If our universe is indeed just a repeating set of evolving pattern/programs which is also susceptible to the powers of evolution or entropy, then it should be possible to map out some unknowns by aligning some of our knowns. A **Minor KEY** was assembled in order to start arranging the four forces and their *Inverse* and *Opposite* manifestations. These KEYS are universal and get detailed quickly so the full deck is located in another document as they demand a more efficient use of margins. This starts the explanation of the *Inverse* and *Opposite* Proof Series.

When looking at this KEY series of characteristics, the phrase 'Inverse and Opposite' shouldn't be thought of as just being one spectrum going left and right (X-axis) but also up and down (Y-axis). There are four main concepts that exist along the X and Y axis and grouping these systems together not only shows the obviousness of their relationships but actually helps with understanding them. This might seem very simple, at first, but as an exercise, it gets interesting very quickly. What are forces to the universes will be shown to manifest as chemicals in the brain in PART TWO. This is what also allows for unknown solutions to be generated from limited known data.

The four main forces exist in all dimension but are manifest in Math by the signs: +, -, *, /. These are the forces in math, so to speak. These pairs of *Inverse and Opposites* might not seem obvious or overly obvious but there are some math rules that point to an embedded underlying dual binary system. How you might ask? Remember how multiplication and division problems seek for their answers to equal 1 as mentioned earlier (Multiplicative Inverse.) Addition and subtraction seek for answers to equal 0 (Additive Inverse.) If you put addition and subtraction at different ends of an X-axis and multiplication and division at opposing ends of a Y-axis, then get an *Inverse and Opposite* joined set of spectrums. To see this visually, see the image in the KEY series labeled **Modern Minor KEY**.

To begin building the **Modern Minor KEY**, start with first aligning each of these math forces up in an abstract fashion with a <u>Gauge Boson</u> representing a force. The Math Symbols are placed in parenthesis only to help separate them out visually. The reasons for the alignment becomes more self-evident as the patter/program grows.

(+)	<~ Gluon
(-)	<~-W, Z,+W Boson
(*)	<~ Photon
(/)	<~ Higgs Boson

Bosons, for those that might not be up on their particle physics, was a term coined by Paul Dirac (1902 - 1984) to pay homage to Satyendra Nath Bose (1894 - 1974) who theorized the Bose-Einstein statistics, which predicts that these particles would exist. These particles were found to 'carry the forces.' Similar to how this paper states that the Zeta Function is the manifestation of the Geometric Primer in a different reality, these particles are the manifestations of forces in different *realities*.

These are the same four forces rendering as colored bands within the Geometric Primer in the second image of The **Geometric Proof**. This means that the forces are indeed manifested in every version of any Complex-System. Three of these we know for sure carry forces we mostly understand but we can imply from the pattern/program laid out where the unknowns should go:

The gray text above is a prediction made by this model and a step towards unification. Basically, there is some overlap where the same effect is being called several things by the science community. But only slightly and because they force isn't unified. For instance, science has detected an anomaly in electrons which will be explained in the upcoming section called The Boot Sequence and further unpacked in the **Major KEY** series. These will explain why why only some left-handed electrons have a bonus <u>Weak-Hypercharge</u> and what that has to do with the Higgs field. Then, with this new understanding of the Higgs Field, taking the concept a step further to explain how Gravity is evolved from it. Here we leave the prediction but the details of these connections, including the accepted evidence, will be laid out in this KEY series.

We haven't added anything other than the Math and Physics concepts but the **Modern Minor KEY** located in the KEY series does contain references to other fields of evidence that will be covered in PART TWO. Included are some additions from various fields of biology and neurology. These are forces are based on the solid evidence uncovered by Neuroscientist <u>Lisa Feldman Barrett</u> and her work regarding the four chemical signals used by our brains (Pleasant, Unpleasant, Arousal, and Calm.) Barrett's evidence shows that only these four chemicals used by our brain are the sole *forces* responsible for the creation of our Emotional Reality. They line up very nicely with this model as they should in a universal model:

It is a lot of words to describe the same thing but it is enough of a start to allow for broader categories to be distilled such as evolution and entropy. Each of these is a concept that may also be aligned along a spectrum and considered:

```
(+), Gluon, [Strong Nuclear Force], {Pleasant}, <~ EVOLUTION (-), -W, Z,+W Boson, [Weak Nuclear Force], {Unpleasant}, <~ ENTROPY
```

(*), Photon, [Electromagnetic Force], {Arousal}, <~ POTENTIAL SELF-ANNIHILATION (/), Higgs Boson, [Weak-Hyper Force], {Calm}, <~ BLACK HOLE CENTRISM

Aligning all of these concepts continue to build along their axis, building out the **Modern Minor KEY**. Take a moment and review the items on the **Modern Minor KEY**. As the next section begins to unfold the *Inverse* and *Opposite* through a series of **Major KEYS**, this **Modern Minor KEY** will be shown to evolve. This evolution is expressed as a **Proto-Minor KEY** series.

Image Three of the Geometric Proof included a logic-sequence for how the different dimensions manifested in their Master/Slave relationship:

In order to get this Geometric Primer going, this logic-sequence needs to be activated. How is that done? The same way it is done with computers, with a procedure known as a Boot Sequence.

What is a Boot Sequence?

The images of the **Geometric Proof** along with the **Modern Minor KEY** represent an already established Universe-System with four different forces and various replicated Complex-Systems. The beginning of the beginnings, though, is not this Model exactly but another series evolved from a specific arrangement of the same events. This is similar to the original default setting of any <u>Boot Sequence</u> used by Computer-System startup protocols. Computer-Systems are just embedded activated Logic-Systems and even though they are created by Human-Systems, Humans can't escape the pattern/program even in their seeming, original interpretations.

Turning the power-on for a computer doesn't start an operating systems such as for Apple OS, Windows, or Unix but instead it starts a **Boot Sequence** which through a series of accelerating steps, starts the operating system. Many times this connects the internal system to a <u>graphic user interface</u> or "GUI," (pronounced 'gooey') so a human operator may interact with a binary logic system through clicks on icons. All of this gives a human user access to a Computer-System.

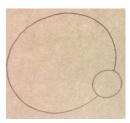
PART TWO will dive deeper into Computer-Systems but the boot sequence will be covered briefly here as it aligns with the Universe-System. Here is what the standard boot logic-sequence for Computer-Systems looks like:

```
BIOS *tick tock* -> wakes CMOS (named after creation-process: memory chip) ->
-> CMOS executes Master Boot Record (MBR) ->
-> MBR executes Grand Unified Bootloader (GRUB) ->
-> GRUB executes Kernel (translator) ->
-> Kernel executes /sbin/Init (short of Initialization) ->
-> Init executes Runlevel Programs (defines state of machine) ->
```

-> Runlevel programs are executed from / etc/rc.d/rc*.d/ (Run Command, contains scripts for stopping and starting) -> Boot Sequence is reset.

Computers were invented slowly for over a hundred years and there are relics and 'fossils' from languages and obsolete programs making these terms seem disconnected such as 'rc.d' which seems to be a throwback to the old Unix notation for Run Command codes. You don't have to know all these terms but they are highlighted if you want to learn more.

Another way to view these steps is to *nest* them in the Master/ Slave Logic pattern/program similar to Image Three of the Geometric Proof. If Image Three is too complicated, start with this image here which shows a very simple nesting arrangement. To turn the Boot Sequence into a linear logic pattern/program that matches this embedded reality, this paper is assisted with the use of brackets:



Simple Fractal Circles

{BIOS *tick tock* -> {wakes CMOS -> {CMOS executes MBR-> {MBR executes GRUB -> {Grub executes Kernel -> {Kernel executes /sbin/Init -> {Init executes Runlevel Programs -> {Runlevel programs are executed from /etc/rc.d/rc*.d/ { } }}}}}}

The Boot Sequence is done when all the proper memory files are running the computer and the Boot Sequence itself is exhausted and reset, leaving a functioning Computer Operating System that Humans may interact with as a now completed Complex-System. Once 'the boot' is finished, all the internal mechanics are switched over to the system modeled by the **Geometric Proof**:

{Complex System (7), {Complex Triplet (6), {Complex Doublet (5), {Complex Singularity (4), {Trinary Set (3), {Binary Couplet (2), {Singularity (1), {Empty-Dimension (0) } } } } } }

The Master/Slave modeling in Image Three of the **Geometric Proof** shows the seven dimensions nested within each other and this further matches the computer networking design called the Open Systems Interconnection Model or OSI Model for short. The OSI model is the industries Internet Protocol Suite that turns networked computers into the internet we use today. Bits of data are encapsulated into different, more complex structures, called segments, then packets, and then frames. Each being built around the next until the



Nested Pattern

completed line-of-bits is finally translated to an electric signal and sent out of the computer as a raw bitstream, measured in Bauds if you were curious. This paper goes over this more in more detail in PART TWO on Computer-Systems but that is the rough outline.

Big Bang Cosmology

How does the current scientific world discuss these earlier moments being described by this Boot Sequence? In the field of physics, ideas for a start up sequence are categorized as Big Bang Cosmology. Specifically, if you are talking to a cosmologist about those earliest moments, these are categorized as the Planck Epoch, after the originator of the idea Max Planck (1858 - 1947). Planck would win the 1918 Noble Prize in Physics for what was, essentially, the founding of the field of Quantum Mechanics. Big Bang Cosmology separates the very few moments of this beginning by further defining them by a new measurement for **TIME** referred to as Planck Time. This is done because the time-intervals start out here very short, a billionth of a second.

The science world knows the Four Forces as currently existing separately, and indeed that is what is represented on the **Modern Minor KEY**. There are many theories that rely upon a Planck Era that models a concentration of all of those Four Forces originating from a single-one. Whatever predictions is made, this issue would need to be resolved. The recorded <u>Supersymmetry</u> needs to be accounted for as well which partially models the similarities between Bosons (energy particles that manifest the forces) and fermions (energy particles that make matter.) So not only does there need to be a unification of energy and matter but also symmetry. With that exposition, this paper segues into the next section where further evidence is unpacked. For this, this computer program gets an upgraded title, The <u>Universal</u> Boot Sequence.

As the **Geometric Proof** explained previously is a 'Universal' proof, first and foremost, this paper will now show *HOW* the logic-sequence of a Universal Boot Sequence would be designed for each growing dimension and what early pattern/ programs first begin to arise. This allows for solid predictions to made, symmetry to be categorized, an alignment of accepted discoveries so a unifying picture may be stitched together into an illustrated dichotomous key. Don't panic, this just means there are more helpful graphics coming up.

The Universal Boot Sequence

A Universal Boot Sequence might seem like an invention being made by this paper but even the pieces trace back to the **Geometric Proof**. Once a *boot sequence* starts, it is on autopilot with no override. Think of when you turn on your computer: you sit there while the machine hums and warms before you are prompted for a password. This is what will be meant by the potential of an Empty-Dimension when it is discussed.

It is like an engine with no fuel or a computer with no electricity. Once you 'turn on' the universe, though, a universe operating system is going to be started.

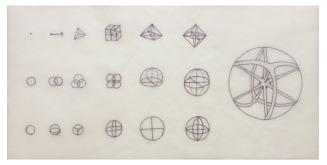
What decides this boot sequence? **Absolute Space** is the reference frame for The Universal Boot Sequence, though it helps to know fancy ways to use bracket { } to help see it better. What is occurring in this Universe Start-Up Sequence is happening automatically once it gets started therefore the rules for this procedure are just an outline for a specific series of events. *Dimensions* are therefore not an actual object being created but an abstract idea describing what is happening at various limit barriers reached during a Universe's initial set-up phase. The potential for dimensional events are always there so it is the initial *fuel* that determines the dimensional outputs, not the other way around.

A boot sequence is also referred to as a <u>Logic-Sequence</u>, as it is just the logical progression of what could happen if all the required pieces are there. Using The Universal Boot Sequence pattern/program tells us how to follow the growth of a fractally evolving universe. This assists the reader in not getting lost by helping to identify where to find correct endpoints. This tool will allow us to correlate different known mysteries dating from around this cosmological time-frame.

Next, this paper needs to create a linear understanding of the pattern/program before showing how it manifests how that sequence runs. The Universal Boot Sequence is a slow blending of logic from Image One and Image Three of the **Geometric Proof**, culminating in a functioning Image Two. What we get from Image Three is the Master/

Slave pattern, the nesting style. We use this nesting pattern/program but with brackets around the individual group programs from Image One. The start of the Boot Sequence needs a place to go so the presence of an Empty-Dimension is represented with empty brackets: { }.

Here is Image One showing the **Absolute Space** panel with no marks on
it. The first row of 1-D objects can be titled



Absolute Space

as being a *Singularity* of some kind. A Singularity will appear in an Empty-Dimension and the Universal Boot Sequence grows by this dimension and our bracket set evolves to look like this: **{Singularity, {}}**. (The space after the Empty-Brackets is left to help the 'Empty-Set' from not getting lost in the future load of brackets.)

The second group of images represents Binary Couplets. These represent dimensions with transitioning characteristics. Think about <u>velocity</u>, it can be seen as a force evolved from the binary relationship between mass and acceleration being coupled together. The Universal Boot Sequence grows by this dimension and our

bracket set looks like this: **[Binary Couplet, {Singularity, { } }]**. See how they are continuing to be embedded together?

The third group are the Trinary Sets that create -1, 0, 1 or 1, 2, 3 patterns like what we see in the W & Z Bosons. This new bracket set is: {Trinary Set, {Binary Couplet, {Singularity, { } }}}.

The fourth group includes those objects that have crossed the unmarked barrier and gained a layer of complexity. The 4th-Dimensions, as mentioned earlier, are just more complex version of the 1st-Dimensional Singularities. Complex Singularities will be shown to include Atoms. Our newest bracket set shows this: **Complex Singularity**, **Trinary Set**, **Binary Couplet**, **Singularity**, **}** }}}.

The fifth group has logic that might seem tricker to identify but looking back at the lower 2-D objects for reference, you can imagine that the 5th-Dimension is just a more complex relationship of movements, examples being Fusion and Fission. The internal structure of an object is changing here, not 'the object relative to space.' Our bracket set gets even longer but you should be following along easily now: **{Complex Doublets, {Complex Singularity, {Trinary Set, {Binary Couplet, {Singularity, {}}}}}**. You should be able to guess now as to what is coming up next because of the pattern/program.

The sixth group is the result of compounding 5th-Dimension's and starts describing complex trinary relationships. These aren't truly stable systems in themselves but they do open up a temporary sweet spot in the Universe Operating System that allows for biological life, at least potentially. At this level, infant galaxies are being established with seemingly complex correlations with mysterious occurrences of Dark Matter, Dark Energy, and Black Holes. Our bracket set evolves to this: **Complex Triplets**, **Complex Doublets**, **Complex Singularity**, **Trinary Set**, **Binary Couplet**, **Singularity**, **}**}

The seventh group is represented by the Geometric Primer and is created by the complexities that occur when 6 X 6th-Dimensional *objects* come together. This transformation also gives the 7th-Dimension a bonus *Aspect*, **SPACE**, to be represented within the same structure that maintains **TIME**. These should be understood as evolved Complex-Systems capable of maintaining both **SPACE** and **TIME** independently and together.

Our universe has evolved its own manifested versions of these superstructures: Large filaments of matter and dark matter, concentrating matter-filled areas while leaving matter-less void spaces. If you would like to take a journey through these structures I recommend the TED Talk by George Smoot called The Design of the Universe. TED's YOUTUBE LINK. This ends our bracket set and places us in the functioning Universe we have access to: {Complex-Systems, {Complex Triplets, {Complex Doublets, {Complex Singularity, {Trinary Set, {Binary Couplet, {Singularity, {}}}}}}. This is why this linear sequence is listed on the Geometric

Proof between Image Two and Image Three. This is what will always be evolved in any Universe-System over **TIME**.

Newton's Third Law of Motion

The Universal Boot Sequence, up to this point, has only just told us what to expect at different levels. These are the initial predictions that will allow us to build a set of 'Major KEYS' which will help us track the other simple pattern/program manifestations going on simultaneously. What other pattern/programs? The *Inverse and Opposite* ones, of course. For every event, including the Zero-Event or Empty-Dimension, the *Inverse and Opposite* symmetry becomes the key influencer for any change or new manifestation from this system.

In order to create change, to move from a homogenous universe to a diversely manifested universe, something is needed to *undo* or *remake* what is there. Evolutionary factors balanced against entropic factors. A deconstructive influence is evolved as a balanced form of chaos against a creative influence with a symmetric output. You might have heard 'that for every action, there is an equal and opposite reaction.' This is just Newton's Third Law of Motion. The usage of the term 'equal' is qualitatively the same here as *Inverse* so we can make a slight update and restate that for every action there is an *Inverse* and *Opposite* reaction.

There are further hints at this transformation in the <u>Boltzmann's entropy formula</u>. Simply, the formula is the relationship between the number of ways a system may be deconstructed from macro-states to a micro-states. These macro-states and micro-states are like this models use of dimensions, are universal and give this universe its *Inverse* and *Opposite* design. It is these *states* or dimensions that are becoming *Inverted* and *Opposed* to each other. As names are arbitrary, the **Major KEYS** uses descriptions that are designed to help the reader better distinguish what is potentially going on embedded within these dimensions. Those terms will be reviewed first as they are used extensively to help keep everything organized.

CAUSAL LOOP and HALTED

The *Inverse and Opposite* exist as a spectrum with specific endpoints on a line. Separations and endings are important events in fractal producing pattern/programs and two main-states are identified and used throughout. First, is the **CAUSAL LOOP**, which is represented with an open loop along the spectrum and should suggest an embedded relationship that relies on something else. The other extreme is a **HALTED** system, represented on the line by a solid square. This should suggest a self-contained system. Here's the spectrum model:



This part of the pattern/program doesn't change as events are unfolding and each new line, no matter where it is drawn, is drawn with the same orientation. The **CAUSAL LOOP** is always on the *left* and the **HALTED** position is on the *right*. I refer to these as main-states but that is just to help describe what they are doing. There is a set of sub-states, too. The sub-states will appear within each text box and be listed as either *process* or *fixed*. Yes, the sub-states are similar and meant to manifest as lesser versions of the main-states. Nothing escapes this pattern/program, as was mentioned.

process and fixed

As the fractal pattern/program unfolds the relationship of these four states (the two main-states and two sub-states), this is what allows this paper to track and verify the *Inverse and Opposite* reactions required to evolve and balance a Complex-System. These are the rules that have to be followed to maintain the logic-sequence and confirm the validity of this model as a Universal Primer. It is also the mechanism that allows for unbiased predictions.

This gives us four options for a complex structures: A **CAUSAL LOOP** that is a *process*; A **HALTED** System that is a *process*; A **CAUSAL LOOP** that is *fixed*; A **HALTED** System that is *fixed*. Each of these has a different *feel* to them as they manifests differently in each dimension. Some reading might be able to see the different sizes of infinity that are implied by those four options but others will see it in time. These sizes will be noted as they become apparent.

If any reader is interested in the science behind how simple patterns create complex programs, this paper refers them to the work of <u>Stephen Wolfram</u> and his book <u>A New Kind of Science</u> (2002). Therein, Wolfram predicts that a universal pattern/ program should exist with the pages of his book full of the many examples of these manifestations.

Planck Days

As this logic-sequence is striving to explain Big Bang Cosmology over seven episodes, each event series is called a **Planck Day**, in honor of Max Planck. For each **Planck Day**, a short explanation is given about the maths and potential events, including some history and links to the modern evidence, followed by the discussion of the Illustrated **Inverse and Opposite Major KEY**. What predictions are made by this model will also be clarified so as to not mislead the inexperienced reader.

Planck Day Zero (P-0)

The Empty-Dimension: {}

This might initially seem like an obvious first unknown to get trapped in, fearing that we can't possibly know anything about even the concept of an *Empty-Dimension* but there is already established Math concepts that let us know that Empty-Dimensions will be there if only first detectable through math and logic.

<u>Set Theory</u> was originally put forth by one person, <u>Georg Cantor</u> (1845 - 1918) in a single paper called: "On a Property of the Collection of All Real Algebraic Numbers," a title giving you direct insight into the prolific nature he explains. It is accepted as fundamental and standard in mathematics. The idea of an 'Empty Set' is addressed (<u>Suggested Video</u>) and here is a list of some of the basic characteristics.

- An Empty Set is denoted with empty brackets { };
- It is the only set that has a size of Zero {} = 0 but,
- If you have 'a Set containing an Empty Set', you count the <u>absolute value</u> of that Empty Set as 1 or mathematically: |{ }| = 1.

The same universe pattern/program is manifesting with Empty-Dimensions and this concept even comes with an embedded binary manifestation of 1 and 0. Notice the ability of the 'Empty Set' to be considered either 1 or 0 based on *relative* information. You do have to account for it, it is always there; it is just *empty*.

Sets can be infinite or finite which in turn can be nested inside other Sets. It might be further postulated that the idea of an *infinite* amount of current Empty-Dimensions would be *Inverse and Opposite* to the idea of a *finite* amount of Filled-Dimensions of the future. These Filled-Dimensions are being evolved from previously Filled-Dimensions but into an *infinitely* surrounding *field* of Empty-Dimensions. Understanding how this works is similar to trying to understand The Infinite Hotel Paradox. (<-TEDed Video Link) This phenomenon is normally classified as a 'paradox' merely because the fundamental framework allowing the logic to work isn't understood. What Cantor gave us was a mathematical understanding of how something that was infinite could have other infinities, of different sizes for no less, tucked inside it. This might seem *trippy* but Cantor did the math.

Proto-Minor KEY P-0

To help us start to visualize what is going on this paper refers now to a **Proto-Minor KEY** for **Planck Day Zero**. The **Modern Minor Key** shows how all the forces are currently separated out but this isn't how a Universe is started. There is a point early in our cosmological history when something else happened that gave rise to everything thereafter. The Empty-Dimension sets the stage for that event but it is an engine without fuel. Nothing is happening but potential is there.

The Empty-Dimension is not robust, having neither knowledge nor the lack thereof. There is something there, remember you can count it, so you can't say that this is "Nothing" or "Null-Space" so the word "Empty" is used as it seems to be less offensive and a more accurate description. What the Empty-Dimension does have is its full

potential. This is what unfolds throughout the **MAJOR KEY** series but it is too early in the history so the **Minor KEY** needs to be considered un-evolved. It is just the axes or the arrows drawn completely inward. Compare the below illustration to the **Modern Minor KEY** located on the **Inverse and Opposite Proof.**

Proto-Minor KEY P-0 (Empty-Dimension)



There are no dimensions to detail at this event before **TIME** has even started or **SPACE** expanded. **Space/Time** does exist, the engine is always there, just action-less until the moment some kind of reactant is added that gives **SPACE** and **TIME** the opportunity to separate and diversify the reactants. **SPACE** and **TIME** are being forced by the *Inverse* and *Opposite* rules to perform the same functions every time. Repeating the same pattern/program. This means that each Empty-Dimension absolutely has unlimited potential with merely some preexisting math rules giving limits and when things get complex, a destination for 'spill-over.'

Mandelbrot Set

In the future embedded-nature, the inability to know where you are in the pattern/ program unless you can define edges is what gives our universe its Fractal nature. Fractals cause confusion and this is why a more robust series of Major KEYS is illustrated. This procedure is based on the traditionally dichotomous key used in biology which helps to better classify the 'fracticality' that is occurring in diverse biological growth systems.

Russell's Paradox

If you are unfamiliar with Fractals, I suggest this video. They discuss some history and give great insight into why the Mandelbrot Set is so famous in fractal loving communities. The Mandelbrot Set also has embedded inside it both the Julia Set and the Faou Set of fractal-patterns, implying that it is probably the fractal set that contains all the other Fractal Sets. Bertrand Russell (1872 - 1970) in 1901 found that Cantors' Set Theory allowed for paradoxes which gave rise to a counter-argument for the potentiality of a Universal Set, a theory later published as Russell's Paradox. This paper offers unification with paradoxes which allows for them, and, therefore, the option for a Universal Set is again able to be considered as a scientific possibility.

The Mandelbrot Set is, in the least, the graphical manifestation of all <u>Complex Numbers</u>. Complex Numbers are just *Numbers in Motion* and the 1927 physic rule put forth by <u>Werner Heisenberg</u> (1901 - 1976) and called his <u>Uncertainty Principle</u>, would also apply universally. This is where you can't know where something is (its position) if

you know how fast it is moving (its momentum). It's the basic rules behind "Still-Frame" and "Action" photography and the math that makes flight control systems work. It's also another manifestation of differences between the references frames of **TIME** and **SPACE** and how their respective rules coexist until they meet at a dual **Space/Time** Dimension.

The notation used in this paper will become familiar as you read through the progression of future **Planck Days** as the procedure should become self-evident if you follow along with this additional commentary.

Major KEY P-0

The **Major KEY P-0** is located in the *Inverse* and *Opposite* **Proof Series** and lays out the beginning of the main-state and sub-state pattern/program with each of the facts of the Empty-Dimension mentioned already. The *emptiness* of the Empty-Dimension is set as a **HALTED** *process*, describing the infinite field Empty-Dimensions. This is also listed as its Quantum Quality. **SPACE**, the expression of quantum-processing, isn't developed yet but the *infinite* potential is always there. There is also an infinite amount of Empty-Dimensions available but with them functioning with specific guidelines. This represents the side that is a *fixed* **CAUSAL LOOP**. These limitations represent the Master/Slave Quality.

Before TIME and SPACE

One of the current questions in science is What is outside not just the <u>observable universe</u>, but that universe as well? When comparing the pattern/program to the standard <u>Planck Time</u> measurements, what happens between a billionth of a second and 10⁻³⁵ seconds, the period before Planck's '<u>Inflationary Era</u>' begins, is unpredicted or unknown. This **TIME** could never be observed with reasonably scaled technology, i.e. this would require a super-collider taking up the **SPACE** the size of a solar system. How could we ever know what had occurred? Only through a logic-sequence that is laid out cleanly with evidence. Predictions may now be made for not only what is outside the *observable universe* but gain confidence around what is occurring inside this unobservable cosmological journey. Are you ready for it to begin?

Planck Day One (P-1)

{Singularity, { } }

What is understood in evolving an <u>Initial Singularity</u> happens already as a part of the evolution of a Complex System but something special is happening here. An already existing Singularity becomes strong enough to punch a hole from its already existing dimension into an Empty-Dimensions. Think of this as the door opening to the Empty-Dimension but no objects, particles, forces, or energies have come through yet. Future

statistical modeling will tell us how long this *door* stays open before whatever *fuel* has a chance to start the Universe-System running. It makes sense on the surface but where is the hard science?

Black Holes and White Holes

The concepts of <u>Singularities</u> are not new and are further connected back to the ideas around <u>Black Holes</u>. What is *Inverse and Opposite* to the Black Hole has already been predicted to be the <u>White Hole</u> and with this paper, that theory further connects that concept to <u>Schwarzschild Wormholes</u>. Wormholes are mostly described as conduits and this Singularity wouldn't need to have mass but rather be the discontinuity that is created between two dimensions that are now touching.

Unlike Black Holes, you wouldn't be able to enter White Holes from the outside while the matter and light already located on the inside are capable of escaping or expanding outward. During the *Initial Singularity* needed to create a Universe-System, the center of a Black Hole would become the center of a White Hole in an Empty-Dimension. In a very short time-frame, all of the energy to make a Universe would be transferred at high enough energy levels that all of the resulting matter in the universe is able to coalesce per the known pattern/program.

These predictions are not far fetched and were made by Einstein's <u>Field Equations</u> in 1915 which put a 'White Hole' event in our cosmological past. <u>Igor Novikov</u> (b. 1935) later rendered those predictions into what we currently understand as White Holes in 1964.

What could a White Hole look like? An artist named <u>Olafur Eliasson</u> (b. 1967) created a <u>toroid</u>-shaped Sphere as the top for the <u>trophy</u> used for The Breakthrough Prize, a set of international scientific recognition awards. Pictured here on the right, an *Initial Singularity* might appear similar to this.



The Breakthrough Prize, sculpted by Olafur Eliasson (2012)

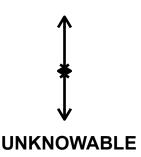
Proto-Minor KEY P-1

Our **Proto-Minor KEY** comes into being with only <u>one</u> axis and as you would expect, it is at its second most simple form. Referencing back to Image Two of The **Geometric Proof**, there are indeed two very basic characteristics you can say about it: it represents everything that we know based on the Geometric Primer located in the center of everything versus everything we don't know located around it in black. Here's what we get:

This is the lowest of the dimensions to be created and as we travel through each **Planck Day**, the rules surrounding the current dimension or reality will not only shift but will do so *Inverse and Opposite* to each other.

Proto-Minor KEY P-1

KNOWABLE



As mentioned earlier, the events of <u>Planck time</u> haven't started yet, the earliest being calculated at 10(-36) seconds which starts Planck's '<u>Inflationary Era</u>' when the Strong Nuclear Force is suggested to have separated from the Weak Nuclear Force. These events are predicted to occur later on **Planck Day Three**. If you look at the **Major KEY P-1** you can see the sub-states have switched from **Planck Day Zero**. This type of *Initial Singularity* is a *process* that is also a **CAUSAL LOOP**.

In each text box, there is a limited amount of characteristics listed along with the sub-states. These are laid out in the pattern/program to help readers follow along as an dimension unfolds. It was mentioned that the sub-states switched on each **Planck Day** but also, as each sub-level is created. The positions of *process* and *fixed* are swapped on both sides whenever applicable. The listed sub-states help to craft and explain different renderings of the pattern/program as their alignments change back and forth under the positions of the main-states **CAUSAL LOOP** or **HALTED**.

The **Major KEYS** represent the *Inverse* and *Opposite* fractal patterns which normally wouldn't end unless something special happens to make them end. A Singularity or Singular-Relationship is one way to start or stop fractal patterns. As these beginnings and endings are crucial, any event occurring to adjust the fractal pattern/program is listed last in the text boxes. These descriptions evolve based on their dimensions and try to capture as much of the underlying characteristics as possible. Additional details or facts are listed in the middle for easy reference.

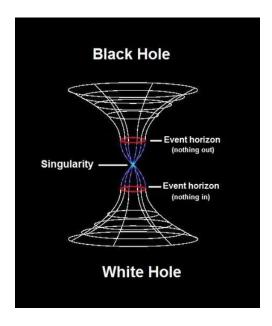
Controversy over White Holes

Mainstream science doesn't accept White Holes because, until recently, they didn't even know that Black Holes existed for sure. Einstein came on the scene and didn't just say, hey, the math suggests that there might be Black Holes, though these were easier to believe in. Einstein showed that if this weird thing existed, there might be

something balancing in the function that would be weird on the other side. This is what became known as the White Hole. The connection between these two singularities is what allows some people to speculate that Time Travel would be possible or even that Black Holes could be worm holes to other dimensions. A bridge of some sort could open up and objects or information pass through.

Fast Radio Burst (FRB)

Based on the model of the Geometric Primer, is there any accepted math or scientific evidence that aligns with the postulated Black Hole to White Hole Formation? According to researchers who are working in this field, Fast Radio Bursts are thought to be evidence of White Hole Singularities, though they admit they don't fully understood what



is causing it. Fast Radio Burst come from environments conducive to Black Holes and coupled with the Geometric Primer, this phenomenon helps further explain a concern called the Black Hole Information Loss Paradox.

Solution for the Black Hole Information Loss Paradox

Where happens to everything in a Black Hole and what happens to all that *stuff* if, like some other math shows, a Black Hole is going to die from Hawking radiation? The Geometric Primer solves this problem with the logic sequence. No information is ever lost, instead data is simply compressed before it transferred through the White Hole.

Solution for Horizon Problems

The edge of what we can see in our universe ends at the edge of what is called the Observable Universe. This is based on the speed of light and it is believed that there is more universe beyond what we may see. There is also the issue with the fact that it is traveling away from us faster than the speed of light, which nothing is supposed to be able to do based on previous understood theories. There might be hints at an answer given to us from Fast Radio Bursts, which have been seen to not just be single occurrences. Some sources are repeaters, which means that a Black Hole may reach a high enough energy level to create a new universe more than once. If a White Hole singularity is opened up in the same dimension, that each energy transfer would push out the preexisting Universe layer giving us the Universe we see today.

Big Bang

The phrase, 'first there was nothing and then it exploded,' may be corrected to, 'first there was emptiness and then something appeared.' This was the Big Bang, though the sound of it would have been based on the reference frame. The sound recorded of two black-holes merging is only a slow blip, for instance (Youtube link.) The information further contained within the **Major KEY Series** doesn't claim to be all inclusive to every sub-event happening but this logic-sequence does try to capture the overall pattern/program in detail. As the paper moves into the more active part of this journey, the reader will begin to understand how each dimension's reality may be understood based on its predicted contents.

Planck Day Two (P-2)

{Binary Couplet, {Singularity, { } }}

The first systems that come through the Initial Singularity must give rise to everything else. The very firsts of the first, there are predicted to be two in this model, would have arrived as the most concentrated manifestation of their 'force,' as it were. There are numerous series of events that are occurring and this sequence is attempting to capture enough to once again show an overall pattern/program. Think of these again as the creation windows for crucial developments.

There are two obvious candidates for the two forces presented at the beginning. One would be a form of super concentrated Electromagnetic Energy or Super <u>Ultra High Energy Gamma Radiation</u>. For reference, the less concentrated manifestations of this energy are objects like the <u>Photon</u> or <u>Radio Waves</u>. The other form of energy is what this paper will be calling the Weak-Hyper Force but what is currently known as the <u>Higgs Boson</u> which makes up the Higgs Field. For this reason it is referred to was the Weak-Hyper/Higgs, to begin unifying these concepts.

These two energy forces weren't chosen just because of their obvious involvement with Black Holes, the originators of our *Initial Singularity*. If a concentrated energy force is going to have to share an infinitely small space, it is better done with another energy force that doesn't care what space the other takes up. The Electromagnetic Force and the Weak-Hyper/Higgs Force are perfect roommates. Electromagnetic Energy and the Photon are both already located across from the Higgs Boson on the **Modern Minor KEY**. This represents the current modeling but there is further evidence that these two forces are ideal candidates for our introductory *Binary Couplet* manifestation of the *Inverse and Opposite* reality.

What does the rest of the world of science actually believe? That is a fair question and will now be address. First, this paper needs to go back, evolve these ideas, and bring several ideas together. Science is tangled with embedded history and knowing one does help with knowing the other.

Dark Energy

Historically, it was Einstein who suggested in 1917 the concept of a Cosmological Constant which was given the Greek Symbol 'Lambda'. It was used to counterbalance gravity to achieve a static universe, meaning that it was a stabilizing factor to keep it from growing. In 1929, Edwin Powell Hubble (1889 - 1953) discovered a red-shift in the light spectrum from far away galaxies showing that these particles of light were getting stretched due to them traveling away from us. Therefore Einstein's symbol, Lambda, the 'constant' to make a static universe - was removed from his equations. The universe wasn't static. Every Physics person knows where this paper is going with this because it is so famous it has been captured even in pop culture. YOUTUBE: PBS SPACETIME

If the universe had sped up, then maybe it was slowing down? In the 1990s, two independent teams of astrophysicist's went looking to calculate the potential deceleration of the universe, but both instead found that it was still speeding up. It wasn't growing at a static speed, either, the speed was accelerating. In 2011 of the team members, Adam Riess, Brian Schmidt, and Saul Perlmutter received the Noble Prize for Physics for this discovery.

In order to learn something about this measurable acceleration, a calculation was done and something incredible was learned. The scientist could make some calculations about *what* was overcoming Gravity, which is a force science understands enough that the quantity or *Mass* of this mysterious inflationary force could be calculated from the recently measured Velocity. The Mass needed by this substance to overcome Gravity made it roughly 68% of the total mass of the entire Universe. This 'stuff' was also everywhere, as well, and Einstein's "Lambda" was brought back to life, applied back to <u>The Standard Model of Particle Physics</u>, but with some changes.

Higgs Boson (particle)

What does the science community currently accept? The 'Stuff' that is making up about roughly 68% of the universe is a mysterious substance the science community now calls 'Dark Energy.' What does Dark Energy have to do with either the Electromagnetic Force or the Weak-Hyper/Higgs Force entering an Empty-Dimension through a White Hole Singularity making a new dimension? There are several reasons to correlate Dark Energy directly with the Weak-Hyper/Higgs Field and a really good explanation as to why this hasn't been published before previously by any scientist. They lack a reason to make a simple leap but here's what is stopping them.

Vacuum-Energy

Currently, Dark Energy is measured as energy per unit <u>volume</u> (~7x10⁻³⁰ g/cm³) while the Weak-Hyper/Higgs has a value of 246 GeV which if you did not notice, is a unit of energy or mass, not volume. (They use a lot of the same words but the difference is there and very big.) Researchers have not yet been able to calculate the *volumetric*

value of the Weak-Hyper/Higgs Fields as 'vacuum-energy' so a correlation has not been inferred directly between their measurements. This is because very little is actually known about 'vacuum-energy,' hence there is no fundamental theory to help make a comparison. No constant formula exists allowing for the conversion like the Mole, a base unit for the amount of a substance, as used in chemistry. For the apprentice physics readers or chef, think of this as the discrepancy in conversion between dry and liquid measurements. If you measure flour in 'a cup' versus a gram scale, the shifting of the flour means you can over- or under-pack the 'cup.' Baking is supposed to result in edible chemistry and if your measurements aren't correct, your food isn't edible. Going from a Solid to a Liquid is different. Going from a Liquid to a Gas is different. From Gas to a Vacuum is different. So imagine going from a Solid all the way down to the Vacuum. The differences add up before a solution resolves out.

What is known about Dark Energy is that it is spread uniformly everywhere in the universe. It also has slightly negative pressure which is seen as being responsible for the increase in the rate of expansion of the universe. This means that when the *Initial Singularity* appears in the Empty-Dimension, it is the Dark Energy/Weak-Hyper Higgs Field that is also pulling itself in. This would be on top of the energy being applied behind it from the Black Hole. Dark Energy also only seems to interact with Gravity, a force which will be accounted for on **Planck Day Four** and which connects back to the Weak-Hyper/Higgs Field. This paper will show how they are all directly connected.

<u>Youtube Video</u>: Anti-gravity and the True Nature of Dark Energy by PBS Space Time. (May 18, 2016)

Evidence for the Higgs Boson at the beginning of the Big Bang

<u>Fedor Bezrukov</u> working with the <u>Riken BNL Research Center</u> and <u>Mikhail Shaposhnikov</u> working with the <u>Swiss Federal Institute of Technology</u> found that the presence of the Higgs Boson at the beginning of The Big Bang would account for the relative stability that we encounter. [<u>Bezrukov</u>, <u>F. & Shaposhnikov</u>, <u>M. Higgs inflation at the critical point. Physics Letters B734, 249–254 (2014).</u>] The evidence is coming in making the connections to early cosmology but a mechanism to combine it all together before now hasn't been possible.

The Viral Higgs Proposition

A prediction into the reason for the negative-pressure exerted by the Weak-Hyper/Higgs Field is an ability predicted by this model. It is implied by the very idea behind something having negative pressure wanting to just equalize everything to its energy level. We are more used to seeing things with neutral pressure being influenced by a temporary positive pressure until a new neutral is raised. The Higgs might be though of as a positive pressure that just never turns off. This is done because the Higgs is able to self-replicate or virally spread its charge. It may be WEAK but it is HYPER, always having the ability to move or energize any space that it comes into contact with.

The Electromagnetic Force is a different beast altogether, something *Inverse* and *Opposite* to the Weak-Hyper/Higgs Force. The Electromagnetic Force decomposes into the Strong and Weak Nuclear Forces but the Weak-Hyper/Higgs self-replicates. The Weak-Hyper/Higgs doesn't have different embedded energy levels, it has one and any excess energy immediately spills over and out, spreading into the emptiness. Meaning, the Weak-Hyper/Higgs Field replicates similar to asexual reproduction and explains the mechanism behind what is driving Thermodynamic Equilibrium on a universal scale.

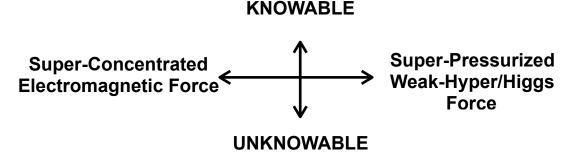
This could explain how such an infinite field could be maintained by such a small amount of energy. If you can't visualize it, just look at the concept of a virus, <u>biological</u> or <u>computer</u>, as a pattern for this program. A virus does not need or even have a brain, it is just a blind-processor performing self-replication. If you give a virus the materials it needs, it will just self-replicate until those materials are exhausted. Viruses are very hard to kill because despite not having the fuel to self-replicate, they will remain viable for countless ages. This viral action might also be why the *'fabric of space'* seems to be flattening itself.

Compared to Empty-Space and despite its relative weakness, the Weak-Hyper/ Higgs is 'hyper' enough to spread that excitation to the surrounding void space, like a viral energy wave creating stabilizing particles. There is yet another compelling reason for the use of the term Weak-Hyper to describe the Higgs Field that will be presented on **Planck Day Four**, but in the meantime, this description does exhibit the qualities of the force better than just saying the word Higgs. This is similar to how the Electromagnetic Force is also describing what two underlying fields create it: Electric and Magnetic. They mean the same and it all comes down to which ones help you remember better.

Proto-Minor KEY P-2

The **Proto-Minor KEY** has gained an additional full axis and now has two fully extended axes. These two axes still need to evolve but will slowly be surrounded by lists of examples full of systems that decompose from these first two occurrences. But on **Planck Day Two**, the rendering of the most basic **Proto-Minor KEY** pattern/program is just four 'things,' and even that word must be used lightly.

Proto-Minor KEY P-2



What exists might be considered the most *super-concentrated* form of the Electromagnetic Force that may possibly exist. The Weak-Hyper/Higgs Force doesn't *concentrate* and would, therefore, be *super-pressurized*. Computer simulations of statistical models based on these logic-sequences would give us exact numbers for the amount and sizes needed for each of these early events including the required force of the Black Holes and needed output energy-levels of successful White Holes. Where are the other forces? The Strong and Weak Nuclear Forces will all evolve through entropy from this Super-Concentrated Electromagnetic Force. The Weak-Hyper/Higgs Field will intern be transformed into the Gravitational Force. The Weak-Hyper/Higgs Force is a self-contained 2nd-Dimensional Singularity and drops off the KEY series on **Planck Day Three** but is brought up again due to events on **Planck Day Four**.

This is the second lowest dimension and it is an actionable stage as will be shown by the **Major KEY P-2**. This dimension defines lower-dimensional *movement* which aligns with this model's need for an upcoming *inflationary* reaction that further propels relationships into the 3rd-Dimension.

Major KEY P-2

The Weak-Hyper/Higgs force, with yet a new nick name of Dark Energy fits nicely as the **HALTED** *process* to the *fixed* Electromagnetic **CAUSAL LOOP**. The Electromagnetic energy is easily called Pure Light Energy to match. The Weak-Hyper/ Higgs Field will give future particles *mass* while still not interacting with the Electromagnetic Forces which will be used in even yet higher dimensions. This is showing how complementary these systems are with each other. As these forces decompose or evolve into yet higher dimensions there are further events that will cause these Forces to sync up between particles.

Cosmic Microwave Background

Is there evidence for the electromagnetic force being anywhere present during The Big Bang? There is indeed a 'Relic Radiation," better known as the Cosmic Microwave Background (CMB). Dating to a Planck Time Period known as the Recombination Epoch, the CMB doesn't date back to this early period but that is okay. This radiation results from higher dimensional decompositions but what this model does succeed in doing is placing a source for the electromagnetic radiation needed for that evolutionary/entropic series to begin. The CMB is considered the best direct evidence for a Big Bang currently and is a reason The Big Bang is included in the Standard Cosmology Model.

Looking back at the discussion on the Electromagnetic Force and Weak-Hyper/ Higgs Force, one might say that what came through the *Initial Singularity* might have been simply the *Inverse and Opposite* forms of pure 'Light' and 'Dark' energy. On **Planck Day One**, the **CAUSAL LOOP** was first set to *process* and **HALTED** was set to *fixed*. For **Planck Day Two**, this is reversed. This means that <u>Pure Dark Energy</u> is a **HALTED**-process while <u>Pure Light Energy</u> is a *fixed*-**CAUSAL LOOP**.

Pure Dark Energy

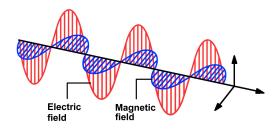
In order to close the fractal pattern/program of the self-sustaining object that is <u>Pure Dark Energy</u>, it manifests as an *Infinite Singularity*. The *Inverse* and *Opposite* is Pure Light Energy, a Binary System of Finite Singularities.

Pure Light Energy

<u>Pure Light Energy</u> may be further unpacked. In its sub-section please note how the terms *process* and *fixed* switch positions from the start of **Planck Day Two**. The Electric Field goes infinitely onward in one direction and shows that it is both *fixed* and **HALTED**, manifesting as a *Singularity*. This is balanced by a Magnetic Field which fits the design of a **CAUSAL LOOP** as a *process*. Together, they act as a *Binary System of Singularities*.

The Magnetic Field further breaks down but first, we check to make sure that our sub-states are shifted properly. The **HALTED** position is now a *process* which matches the function of an <u>Energy Field</u> and is *Singularity*. The *fixed-***CAUSAL LOOP** is the underlying <u>Polarity</u> and with this last Binary System of Singularities, the fractal pattern/ program for these relationships are tied off.

Photon (particle)



The Photon is a gauge boson carrying the electromagnetic force which is made of two fields, an <u>electric field</u> intertwined perpendicular to a <u>magnetic field</u>. This meets the description of a *fixed* **CAUSAL LOOP**, and is an obvious Binary Couplet and will evolve between this dimension and the next. The <u>Electromagnetic</u> Force is manifested in higher dimensions when

Complex Singularities exchange photons - this is why it is said that Photons 'carry' the force.

Recent work was done to capture an image of a Photon shown here. This was done by a team at the Ecole Polytechnique Federale de Lausanne and shows a Photon as both a particle and a wave. News Article. A Photon finally shows itself to be an *object* with both *direction* and *magnitude* and very strictly speaking. This meets the classic definition of a Yector. If you take into consideration the other scientific fields that use the term vector, the definition could average down to be 'an object that emits.' The Photon is the simplest visible physical manifestation of this description. This sets the stage for the Planck Recombination Epoch that is predicted by Standard Cosmology theories.

Grand Unified Theory

The various theories that claim the Electromagnetic, Strong Nuclear, and Weak Nuclear forces were once one, are categorized as Grand
Unified Theories. They call this single manifestation of three forces, the Electroweak Force. Planck Day Two referred to this state by its characteristics, Super-Concentrated Electromagnetic Force. For the most part, they are the same thing. By Planck Day Three, the Electromagnetic Force is ready to be decompose out into the Strong and Weak Nuclear forces, not as particles exactly, but as stabilizing events which result in manifested particles.

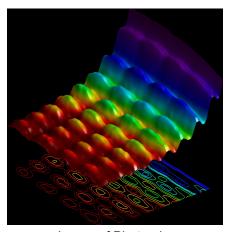


Image of Photon by Ecole Polytechnique Federale de Lausanne (2015)

Planck Day Three (P-3)

{Trinary Set, {Binary Couplet, {Singularity, { } }}}

What is a <u>Trinary</u> Set? On a number line, trinary is represented by three numbers: -1, 0, 1 or even 1, 2, 3. If you go back to The **Geometric Primer** and look the internal-processing structure which is the manifestation of 'a *Binary Couplet of Trinary Sets*.' The Binary Couplet is represented by the light versus the dark-shaded patterns. Each pattern, though, has three points that meet at three different locations. If you think of those central meeting points as locations of small explosions sending the three parts out, along a route regulated by a force that then sends these three parts back to the second location, you'll have the idea. If this ran by itself it should sound like the elusive and hypothetical <u>Perpetual Motion Machine</u>.



A Binary Couplet of Trinary Sets.

Quantum Chromodynamics

The recombination effects described by the Trinary Set, also describe what is going on behind Quantum Chromodynamics. QCD, as it is also known, is responsible for the Strong Nuclear Force and therefore its gauge boson, the Gluon. It was once believed that the center of an atom was like the calm-eye of an electron storm. The truth was more *Inverse and Opposite*. The center of Protons and Neutrons are made of Quarks that are constantly remaking themselves by recycling what is termed Colored Gluons. Another trinary set, the 'colors' of these Gluons are red, blue, and green and

counting their anti-colors, anti-red (cyan), anti-blue (Magenta), and anti-green (Yellow), another embedded binary couplet is revealed alongside a Trinary Set.

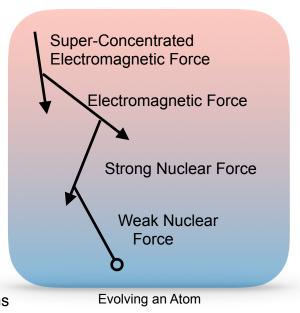
Strong Nuclear Force

The Gluon is embedded in Protons and Neutrons along with Quarks as described in Quantum Chromodynamics but Protons, Neutrons, and Quarks don't exist yet as the universe currently knows them. It is still too early. Gluons, though, happen to be a self-contained *process* or **CAUSAL LOOPs** and also held together by The Strong Nuclear Force. The Strong Nuclear Force is stabilized when fluxing with itself as a group of gluons, creating a known particle called a <u>Glue-Ball</u>. The Protons, Neutrons, and Quarks are evolved during some event between this dimension and the next but first, the *Glue* is made. What comes next, then, is the evolution of The Strong and Weak Nuclear Force from the Electromagnetic Force that is already present

Weak Nuclear Force

The Weak Nuclear Force is the **HALTED** end of the spectrum as is manifested by the <u>W& Z Bosons</u>. These gauge boson for the Weak Nuclear Force make an obvious candidate as they are a self-contained Trinary Set. The Weak Nuclear Force is also the force maintained between the fluxing-antimatter created on **Planck Day Four**. The bosons for the Weak Nuclear Force are represented in long-hand as -W, Z, +W. This means that the two W Bosons have either a positive or negative electric charge (+W, -W) and already represent each other's 'antiparticle,' with the neutral Z Boson acting as a singularity, completing this independent Trinary Set which aligns with the fact that this system is *fixed*.

The Weak Nuclear Force is an elegant locked Trinary Set and acts Inverse and Opposite to the Strong Nuclear Force. In science, The Weak Nuclear Force is considered very odd because it violates the symmetries of the Strong Nuclear Force and the Electromagnetic Force including Parity, Charge Conjugation, and Time-Reversal. This means that the Weak Force is displaying all sorts of variant symmetries. The reason for this has never been understood before but this model makes the reason clear. Atoms are evolved from the decomposition of the Electromagnetic Force until it reaches stabilizing events. The Weak Nuclear Force. manifested by antiparticles, is what keeps atoms from closing back in on themselves immediately.

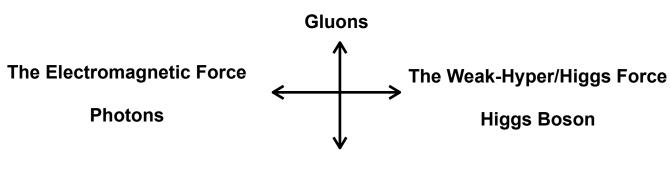


Proto-Minor KEY P-3

With our **Modern Minor KEY**, the term UNKNOWN is no longer listed, it is pushed off the Proto-KEY series. Each KEY series is used for only those events being viewed in a specific field of reference or dimension. This **Proto-Minor KEY** now starts to match the basic form of our **Modern Minor KEY** with a list of a couple of the basic known *Inverse and Opposites* Forces. What does exist here is the simplest manifestations of forces and their gauge bosons.

Proto-Minor KEY P-3

The Strong Nuclear Force



The Weak Nuclear Force

-W, Z, +W Bosons

The **Modern Minor KEY** continues to build off this pattern/program and contains the manifestations of the forces found in the other Complex-Systems. Those will be reviewed in future sections.

Major KEY P-3

The **Major KEY P-3** shows The Strong Nuclear Force as the *Inverse* and *Opposite* of the Weak Nuclear Force for the reasons. Looking at the **Major KEY P-3**, these relationships are further unpacked. The Strong Nuclear Force acts as a **CAUSAL LOOP** that is a *process* and this is apparent when looking at the Gluon, its gauge boson.

Gluon (particle)

Gluons exist not in a stable-state but in flux-state just as the future Quarks, Protons, and Neutrons being evolved on **Planck Day Four** will manifest. These other

particles listed are also using the the Strong Nuclear Force but they do it by exchanging Gluons. There are Colored- and Color-Neutral Gluons, as well. The Color-Neutral Gluon is a **HALTED** process while Colored-Gluons are a fixed **CAUSAL LOOP**. This doesn't mean a lot until you look at the use of the colors. Color-Neutral Gluons represent a transition or mixing-state which creates two 'Diagonal' types which manifest a Trinary Set embedded with a Binary Output. Colored Gluons are temporarily locked until they do an exchange with Gluons that brings them back to a color neutral state.

The Colored-Gluons have a color, (Red, Green, or Blue) or an anti-color, (Cyan, Magenta, or Yellow.) The Color-Singlet attribute is a **CAUSAL LOOP**, a *process*, and functions as a Trinary Relationship between the colors. Colored-Gluons also have a Net Zero attribute, this is their color-less phase, making that aspect a good fit for a **HALTED** and *fixed* Singularity.

Bose-Einstein Statistics

Is there any mathematical evidence in accepted science that would explain how these forces are able to be embedded together? Indeed, the <u>Bose-Einstein statistics</u> defines these and other characteristics of particles. Fermions have what are called half-integer *Spin* s and these particles won't share the same space but will be evolved next in this series. This makes sense as Fermions with Leptons will evolve matter and that matter will take up space. Bosons, on the other hand, have full integer *Spin* and just like the Bosons being described on **Planck Day Two** and **Planck Day Three**, these have no issue bunching up and sharing space. This means that the potential for this series being possible, mathematically, already exists.

Spin-Statistics Theorem

Spin is also seen as the angular momentum of a given particle, and angular momentum if the reader remembers is apart of the Rotational Kinetic Energy formula K.E. = ½ I w². The angular momentum is squared and represented by the w². But it was this connection between integer Spin and the 'symmetric states' or this ability to share the same space, which required both Quantum Mechanics and General Relativity to explain it. Spin was recognized as being the first important connection between two fields that are seemingly so different and yet are found to be functional. Spin-Statistics Theorem shows a manifested connection between measurable, mathematical research and basic logic. This paper is just showing where more of these connections are. The paper that defines Spin-Statistics theorem is: The Connection Between Spin and Statistics by W. Pauli (1940).

Perfectly Collimated Electromagnetic Radiation

How specifically is the Electromagnetic Force brought to the point of decomposing into these two other forces? One postulation might be that the Super-Concentrated Electromagnetic Energy coming through the White Hole is a 'perfectly

<u>collimated light beam</u>' which doesn't disperse with distance. Instead, the effects of the entrance and quick expansion of this force so rapidly across **SPACE** and **TIME** causing the Electromagnetic Force to essentially pull itself apart on a dimensional level. Luckily for us, into new stable energy forms.

Perfectly Collimated Electromagnetic Radiation, in general is thought not to exist because of limiting factors which are removed by this paper. Coming from a White Hole into an Empty-Dimension means there is no issue with <u>diffraction</u>. It is empty of anything that could be diffracted it. Black Holes are also violators of infinity and Perfectly Collimated light is sometimes said to be focused at infinity which means even the root source of this light also aligns and gives us potentially great insight into the nature of Black and White Holes.

Birth of Atoms

The Weak Nuclear Force is *fixed* and **HALTED** and for our next **Planck Day Four**, its visibility falls off the KEY. The Weak Nuclear Force is after all an embedded or enslaved force but it is these Trinary Sets that enable the universe to stabilize and evolve the Complex Singularities known as atoms. Indeed, this is what is patterned out on **Planck Day Four** and its all thanks to the Weak Nuclear Force. The universe will soon be primed for the evolution of individual atoms into higher elements. As the **Proto-Minor KEY P-3** is aligned with the **Modern Minor KEY**, at least in function, the proto-concept will no longer be addressed directly.

Planck Day Four (P-4)

{Complex Singularity, {Trinary Set, {Binary Couplet, {Singularity, {}}}}}

As a review, what is already existing at this point are the four <u>gauge bosons</u> and the four forces they represent. Complex Singularities will now begin to evolve out and the universe will start to begin to resemble something we recognize with the evolution of basic atomic elements. The events occurring in the 4th-Dimension will automatically start to evolve.

Major KEY P-4

The center of an atom will contain protons and eventually neutrons with an orbiting electron that encapsulates the whole to make a Complex Singularity. When quarks flux together to make a single proton, this is called Protium, the earliest form of matter and the first isotope of Hydrogen. *Inverse and Opposite* from this encapsulated system of nestled *fixed* **CAUSAL LOOP** is a **HALTED** *process* relationship. The reader might assume to call the *Inverse* and *Opposite* of matter, *antimatter*, but that term is already used for something else. But this **HALTED** *process* would not act the same as

the already classified <u>antiparticles</u>, where antimatter is the term used to group all of these particles. Formerly, in the lower dimensions, the 'anti-' characteristic acts annihilistically as apart of a **CAUSAL LOOP**, but in this higher, *Inverse* and *Opposite* dimension, the 'anti-' characteristic acts *Inversely* and *Oppositely* to that functioning parameter. Instead of annihilating, this substance is aligning or syncing with something else that is already there.

Dark Matter

Remember, Dark Energy makes up around 68% of the density of the Universe. Another 24% of this energy density of the universe is the mysterious substance known as Dark Matter. Dark matter is called dark because it doesn't interact with light or rather, the Electromagnetic Force but its presence is implied in a variety of astrophysical effects. For instance, the math shows that the amount of gravity needed for a galaxy to hold itself together requires way more matter than we can see. Basically, the galaxies in our universe look like thin-milkshakes in a blender but are instead acting like thick-milkshakes. Science believes Dark Matter is what is causing this discrepancy but its origin was also seen as a mystery.

Gravititational Force

This paper postulates that Dark Matter is a by-product from the evolution of matter that undergoes a synchronization event with the surrounding Weak-Hyper/Higgs Fields. The effects of the Weak-Hyper/Higgs Field is intensified making a 'Heavy Higgs'. This doesn't interfere with the working experience that Dark Matter is not interacting at all with the Electromagnetic Force. It could be said that Pure Light Energy is related to Light Matter and Pure Dark Energy is related to Dark Matter. If the Weak-Hyper/Higgs Field gives particle *mass* then the Dark Matter saturated Field must be having a stronger influence and this is gravity. This would be the explanation for what is known as the Gravitational Force and leads the way for future external-processing relationships occurring in the 5th-Dimension on **Planck Day Five**.

WIMPS (particles)

A 'Heavy Higgs' isn't an invented concept either. This idea is also similar to the ideas around WIMPS: Weakly Interacting Massive Particles. These are theorized as being the manifestations of Dark Matter particles. The Theory of Supersymmetry also makes a prediction for this particle with the coincidence being considered a *miracle*. Miracles are normally seen as too esoteric for science but some ideas start out this way, as coincidence. Though, none of these theories are able to account for where these particles might originate. Indeed, that would need to be apart of any viable Cosmological Explanation as it is in this paper.

<u>Youtube Video</u>: While Looking for Dark Matter, Scientists Discover Something Way Cooler by Anton Petrov. (May 4, 2019)

Quarks (particles)

Quarks and Hadrons evolve Protons and Neutrons, due to the exchange of color and anti-color gluons, being locked in a constant fluxing cycle. This represents a **CAUSAL LOOP** *process* inside a finite Complex Singularity. The exchange between antiparticles and colored gluons acts as a Trinary Set of Binary Couplets. The Quarks also have fractional total charges, a **HALTED** *process*. The UP-Types being ½ and DOWN-Types being ½. It takes a trinary set of Quarks to make Hadrons, specifically protons and neutrons and it is those fractional charges totaled up which determines which one is made. The Colored-Gluons on the other hand act as an embedded *fixed* **CAUSAL LOOP** which is a syncing with the Strong Nuclear Force: an embedded binary couplet.

<u>Youtube Video</u>: How Quarks Fixed the Mess That Was Particle Physics by SciShow. (July 19, 2018)

Inverse and Opposite Alignment of Quarks

All of the Quarks are more easily understood when illustrated according to their symmetry. This illustration is located in the *Inverse* and *Opposite* Proof Series. This series looks very similar to the symmetry of the **Modern Minor KEY** located in the same document. The strengths of interactions are also represented by the difference in thickness of the bands.

Hadrons (particle group)

Quarks make <u>Hadrons</u> and Hadrons are capable of evolving atom nuclei. Hadrons do this by using two different groups of particles called Mesons and Baryons. Baryons include particles such as the Proton and the Neutron, which were evolved on **Planck Day Four**. The Mesons include particles such as the Pion and Kaon. These two groups are very similar with the main difference being their symmetry. The Baryons are typically made with three quarks while the Mesons are made with only two quarks.

Baryons and Antibaryons (particles)

Quarks were mentioned as having 'colored gluons' but Hadrons have no 'color' but are still made of Quarks and Gluons. This is achieved with simply a Quark paired with an Antiquark for the Meson or three Quarks, one of each color or anticolor, to make a Baryon or Antibaryon. Officially, this characteristic is called <u>Color Confinement</u>. Being made of Quarks, Hadrons are held together by gluons and their every changing color-singlet state. This makes Hadrons super interesting particles because most of their mass doesn't come from their valance quarks interacting with the Weak-Hyper Higgs Force but due to something called the mass-energy equivalence. This means that most

of the mass in Hadrons comes from these internal, constant underlying Strong Nuclear Force interactions.

Hadrons may experience *resonance* which is just an excited state over the ground state of zero. Resonance decays occur much faster than normal Hadron decay but overall most Hadrons are unstable and will decay pretty quickly. The possible exception to this is currently believed to be the proton and antiproton. Researchers have yet to record the <u>decomposition of a proton</u> and they are looking.

Hadrons have been predicted and found to be made of more than three Quarks such as the <u>Pentaquark</u>. The subject does go deeper but hasn't been unpacked yet. The purpose of Hadrons, though should be unpacked. For the Baryons, these evolve into matter which is straight forward. Mesons are still a mystery, though, and show themselves to be related to the need for that matter to be changeable.

Mesons Particles

Meson particles exist as Trinary Sets of flavors with one balancing antimeson that sits *Inverse* and *Opposite* for balance. For example, the Pion Meson has four flavors: a negative, neutral, antineutral, and positive Pion. The Kaon Meson therefore also has a negative, neutral, antineutral, and positive Kaon. This

Antigreen

Baryon

Red

Antibaryon
Antigreen

Antiblue

Antired

Color Confinement in Hadrons

is very different than the Baryons, whose Protons and Neutrons don't come with different charges, they are manifestations of different charges with their antiparticles being another full spectrum represented as well. This might imply that Mesons are *Inverse* and *Opposite* particles to the Baryons. They are stacking up that way. <u>Youtube Video</u>

Mesons allow for an exchange of quarks, which if the reader remembers is their embedded particle. This allows for the fusion and fission stage of protostar development to occur much smoothly. Like owning a bakers shop between a flour and sugar mill. This occurs because the decays of Mesons are much slower allowing their specific parts to be held available for demanding cycles. Mesons are therefore supporting the mixing-state of other Hadrons.

Inverse and Opposite Alignment of Hadrons

This illustration is located in the *Inverse* and *Opposite* Proof Series under Hadrons. In this illustration, the charges of the underlying particles are aligned according to what is *Inverse* and *Opposite* about them. Baryons and Antibaryons have their four charges manifesting as different particles in order to evolve or annihilate matter. Mesons and the single Antimeson each all have their own manifestations of the

four charges which further allows for a diverse mixing-state to become available for said matter. The symmetry maybe described as series of Binary Couplets and Doublets.

Electron (particle)

The **HALTED** main-state of our Complex Singularity is the known counterpart of the atomic nuclei, the <u>Electron</u>. The Electron's field or orbit is a **HALTED**, *fixed* field that exists around the **CAUSAL LOOP** *process* center of an atom. The Electron is first in a group of particles called Leptons and it also has an antiparticle called a <u>Positron</u>. The remaining Leptons are created closer to the end of this dimension and the next and will be further unpacked as a group to show their symmetry and working relationship.

The Electron can be thought of as a shell which in higher dimensions manifests as an even heavier shell. How does this work and why does it matter? Thinking in video game terms, the Electron acts like a protective shell similar to a Mario Bros Universe green turtle shell. This shell protects the creature inside in the lower levels,





the Koopa. Eventually, the player gains the ability to hold onto the green shell by first jumping on it to deactivate the Koopa. The shell is then hurled at enemies as a weapon. In higher level games, there's a Trinary Set of red turtle shells that becomes a weapon that may be targeted to hurled at others. The 'Heavy' Electrons manifesting in higher dimensions will work very similarly, supporting entropic reactions.

The Weak/Hypercharge and the Weak-Hyper Force

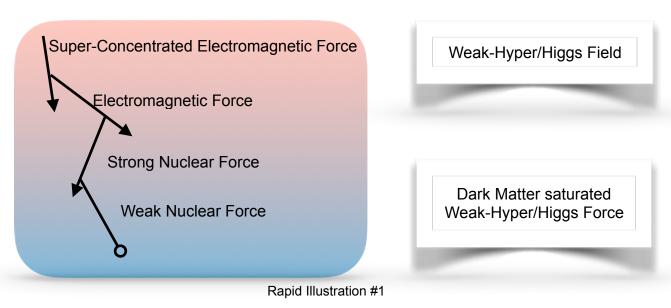
The Electron itself has some embedded characters that may be broken down. The mass of an Electron is a **HALTED** *process* or a finite vector existing as a finite field. Fields are trinary manifestations simply because vectors deal with sets of three axes. An Electron also has *Chirality* or handedness. Science hasn't known why but electrons may be either Left-Handed or Right-Handed. These characteristics exist *Inverse* and *Opposite* to each other with the Right-Handed Electron being a **HALTED** *fixed* finite Singularity. The Left-Handed Electron is a **CAUSAL LOOP** *process* and these have the unique option of being able to sync with what is called the <u>Weak-Hypercharge</u>. What is known is that the Weak-Hypercharge allows Left-Handed Electrons to interact with the Higgs Field. It is this term and event that this paper evolves into the idea of the Weak-Hyper/Higgs Force. And indeed it is postulated here that Left-Handed Electrons synchronize with the Weak-Hyper/Higgs Field as apart of their manifestation of symmetry for this *Inverse* and *Opposite* model.

You can think of the Weak-Hyper/Higgs Field as being like a barrier of balls on the surface of a pond. In the pond under the balls, water acts chaotically, trying to get everything in equilibrium. Above the pond in the ball field, it takes more force to move. If you were to get into a boat and drive into the middle of a ball-filled pond and turn the engine off, you would barely move. Here's a link to the Youtube channel Veritasium and

a video called <u>Why are 96,000,000 Black Balls on this Reservoir?</u> -> <u>Link Here</u>. They drive a boat into a Los Angelas Reservoir full of 'shade-balls' to explain some cool science but you can hopefully glean an idea from it if you couldn't imagine a Weak-Hyper/Higgs Field before.

Rapid Illustration #1

To help review what has been evolved since the Initial Singularity entered the Empty-Dimensions, a *rapid* visualization is posted below. The larger box shows all the embedded actions that have gone into just making an atom. The evolution of the atom came about due to a balancing *Inverse* and *Opposite* reaction involving several other individual forces and particles. These additional outputs of the pattern/program make up the Weak-Hyper/Higgs Field and the Dark Matter saturated Weak-Hyper/Higgs Force. It's easiest to think of them as three different particles but it is important for science to know where they all came from.



This completes the review of the 4th-Dimension but in so doing, a limit barrier is crossed and a bonus aspect is added. For some it is *mass*, but for others, it is something effecting that mass, i.e. *gravity*. In Planck Cosmology, we have reached the Recombination Epoch and the event source of the Cosmic Microwave Background has taken place. What precipitated out was the first electrically neutral Hydrogen Atom. Time period: 379,000 years after the Initial Singularity or 'Big Bang.'

Planck Day Five (P-5)

{Complex Doublet, {Complex Singularity, {Trinary Set, {Binary Couplet, {Singularity, { } }}}}

The first prolific element to be created was Hydrogen, which makes up roughly 75% of the current Baryonic Mass, which is the total weight of all the Light Matter created for our universe to evolve into other Complex-Systems. This isn't on par with density as the total density of this Light Matter is only 5% of the total density of the universe. The Light Matter of the universe was also created in conjunction with the 24% that is Dark matter. Whatever reaction is occurring, it is not very efficient when it comes to making Light Matter. Obviously, if you just look at the night sky, the reader can see that it was still plenty enough.

Things to know about <u>Hydrogen</u>: it isn't a metal, it has no color, no odor, no taste, and is considered non-toxic though highly flammable with an eventual stable molecular formula of H₂. There is a very common isotope of hydrogen called <u>Protium</u>, symbol ¹H that has one proton and no neutrons or electrons. It was easy coercion to evolve these protium's to full Hydrogen <u>allotropy</u> with the right amount of pressure pressure. This event occurs due to <u>Nuclear Fusion</u> and sets the stage for **Planck Day Five**.

Nuclear Reactions

Protium's aren't the only isotope of Hydrogen and show another embedded hint at our underly system. There are 'zero to six' isotopes or energy levels of Hydrogen based on the number of neutrons, so seven total. If you allocate the zero neutron isotope, Protium, for the Empty-Dimension; then the isotope with one neutron, Deuterium, for Day-One; two neutrons or Tritium would be for Day-Two, and so on to Hydrogen-7 that has the half-life of 23 yoctoseconds (2.3x10-23 seconds.) The reader will see the symmetry evident in the energy-level characteristics of Hydrogen further manifesting the pattern/program.

Nuclear Fusion

Nuclear Fusion is the reaction that occurs when two nuclei are made to fuse together creating something new. Nuclear Fusion began being studied in the 1920s when it was suggested by Arthur Eddington (1882 - 1944) that it could be the source of stellar energy. The work continued into the 1930s and by the 1940s the research into this field took a military turn. They used that knowledge to make atomic bombs.

Nuclear Fission

<u>Nuclear Fission</u> is the *Inverse* and *Opposite* to Nuclear Fusion and the two together exist as Nuclear Reactions. Gravity, Heat, and Pressure begin acting upon al the Hydrogen atoms, drawing them together, evolving the first large Proto-Proto-planets. Is there anything else in this dimension adding to these Nuclear Reactions? Indeed, there is. There exist unusual particles that previously seemed to be just odd. Instead, if

you align their known characteristics to this model, another manifestation of the *Inverse* and *Opposite* is revealed.

Muon (particle)

Muons were considered mysterious with their one antiparticle called the Antimuon. Muons and Antimuons have a charge that is either -1 or +1 respectfully but this isn't what makes Muon's unusual. They exist as a manifestation of a 'heavy electron.' They are just like an Electron/Positron but way heavier. Over two hundred times heavier. Scientist don't know why the universe in making an Electron, would also order a heavier one. Everything has a purpose so what is going on here?

If you remember on **Planck Day Four**, Dark Matter saturates the Weak-Hyper/ Higgs Field creating the Gravitational Force. This was an *Inverse* and *Opposite* balancing reaction, that is how the characteristics of Dark Matter were predicted. The Muon is also apart of a balancing set of *Inverse* and *Opposites*, though, this one isn't easy to see without an illustration. The pattern/program also begins on **Planck Day Four** with the Electron, which was shown as a crucial Complex Singularity. In lower dimensions the Electron seems to be stable enough field to contain an atomic nuclei. In higher dimensions, the *Inverse* and *Opposite* manifestations of the Electron rely on that field's other traits.

Muons are heavy electrons but they also do something even more interesting that relates to effects happening during the current **Planck Day Five**. In this higher dimension, Muons work to maximize the effects of Nuclear Reactions. How do they do this? Muons are known to work as a catalyst allowing Nuclear Fusion to occur at room temperature. Muons may therefore be thought of as accelerant that is being evolved at the core of Nuclear Reactions. This means that the Muon particles exists ideally to escalate Nuclear Reactions currently underway and already defined by this dimension.

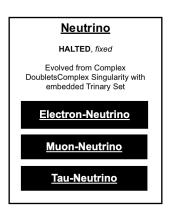
This might explain why Muons also have no interactions with either the Strong or Weak Nuclear Force. They are not designed for these types of interactions but to promote the nuclear reaction process in stars. Muons are evolved by accelerating Protons into other nuclei, the denser the better. This puts Muons as a key ingredients in the cooking pot of Proto-Star development. Youtube link to learn more.

Major KEY P-5

Muons are evolved through the relationship of a Complex Doublet, first when a photon hits a nuclei. This produces a second Complex Doublet as a pi meson is created which decomposes into a Muon, which then act as a Complex Singularity. The Muon then decomposes into a Trinary Set of two neutrinos and one electron. This is why this fractal pattern/program is listed on the **Major KEY P-5** with Nuclear Fusion, it has all the requirements to be there.

Time-Dilation

Muons have one last interesting trait: they travel nearly at the speed of light which causes them to experience decay on their own private time clock. Traveling at or near the speed of light causes **TIME** to be predicted to behave in this way according to <u>Special Relativity</u>. This effect is believed to be due to an effect of Special Relativity called <u>Time-Dilation</u>. The Master/Slave model of the Geometric Primer is the structure that allows for Time-Dilation and supports this explanation. <u>Youtube link on Time-Dilation</u>. <u>Youtube link on Special-Relativity made easy</u>. Modern science doesn't have a problem with these concepts, it just didn't know how to explain them.



Tau (particle)

What is a Tau Particle? A Muon is over two-hundred times bigger than an Electron but the Tau is over one-thousand times bigger. If the Muon is unusual, then the Tau is considered to be a freak of nature. Where does the Tau particle fit in? The Tau is only known to interact with the Weak Nuclear Force which on Planck Day Five is very busy doing the work of Nuclear Fission. The Tau, being very heavy, would then be acting as a battering-ram in fissionable events. So it may be said that the Muon is promoting Nuclear Fusion by being an environment accelerant and the Tau is promoting Nuclear Fission by being a physical accelerant.

The Electron, Muon and Tau are three different flavors of particles known as Leptons. The first three have been described as being *Inverse* and *Opposite* to each other meaning that they have a symmetrical relationship. Is there something *Inverse* and *Opposite* to this Trinary Set? There is, the other three Leptons not already covered called Neutrinos and Sterile Neurtinos.

Neutrino (particle)

Neutrinos manifest as the *Inverse* and *Opposite* of three different particles by being a single particle that changes its identity over distance. Neutrinos are range-dependent, a **HALTED** *process*, meaning they remember their origin regardless of the distance crossed. There are internal three flavors of Neutrinos that change according to this internal settings. The Neutrino mass-states are called the Electron-Neutrino, the Muon-Neutrino, and the Tau-Neutrino. Not to confuse the reader, that is just what they are already called. This is just another embedded Trinary characteristic manifesting the *'Flavors in Flight.'* The fluxing of the internal state of Neutrinos is also called *Superposition*, and represents a *fixed* **CAUSAL LOOP**.

Neutrinos do not interact with the Electromagnetic Force but with gravity which this paper has postulated is related to Dark Matter, and further, to the Weak-Hyper/

Higgs Field. Neutrinos exist on the **Major KEY P-5** as a *fixed*, **HALTED** Complex Doublet. What is that Complex Doublet? Complex Doublets are nuclear interactions as Neutrinos are created as byproducts from reactions.

Sterile Neutrino

There is an antiparticle to the Neutrino called the Antineutrino but it differs from regular neutrinos in that it is right-handed, not left-handed. All other Neutrinos are Left-Handed. Right-handed Neutrinos are considered <u>Sterile Neutrinos</u> and haven't been observed. They are believed to exist because other models predict such a particle, as well as other particles having options for left or right handedness. This model doesn't exclude the option completely but aligns the Sterile Neutrino with the *Inverse* and *Opposite* and the previously mentioned Leptons (Electron, Muon, Tau, Electron Neutrino, Muon Neutrino, and Tau Neutrino) and a pattern/program does appear.

Inverse and Opposite alignment of Leptons

The symmetry of Leptons is more evolved than that of Quarks and Hadrons. The illustration of this symmetry is located on the *Inverse* and *Opposite* Proof Series. The predictions for Sterile Neutrinos are not outside of the *Inverse* and *Opposite* model. Sterile Neutrinos are predicted to have no interaction with any manifestation of the Electromagnetic Force but instead, it reacts with the Weak-Hyper/Higgs Field. The Sterile Neutrinos allow for the evolution of a mixing-state for regular Neutrinos. This characteristic correlates to the general pattern/program already displayed during this **Planck Day** with particles being evolved to support reactions.

Beginning of Star Formation

Nuclear Reactions evolve elements into heavier and heavier elements, increasing gravity and outlines the proto-evolution of <u>star formation</u>. These early stars didn't yet have large concentrations of heavier elements but would become what is called <u>Population III</u> stars. Some of these stars will find an early fractal end as Black Holes a valuable occurrence that will be up-cycled. The Universe is continuing to evolve 'sweet spots' of stability where even more complex mechanisms may unfold. The next series of structures come about as a result of this ongoing construction.

Planck Day Six (P-6)

{Complex Triplet, {Complex Doublet, {Complex Singularity, {Trinary Set, {Binary Couplet, {Singularity, { } }}}}}

Major KEY P-6

A Complex Doublet was explained to be a transformative event with Complex Triplets evolving as a further result. What is evolving out next will be the giant structures resulting from these complex interactions as they become stabilized in the 6th-Dimension. Nuclear Reactions have begun evolving proto-stars which are evolving heavier and until even metals are being distributed through the universe. **Planck Day Six** defines the Universe-System's evolution from single Proto-Stars to Proto-Galaxies and the effects these large structures have as they tug onto the 'fabric of space', the Weak-Hyper/Higgs Field.

Back Hole Clusters

Protogalaxies will actually start out in some kind of Proto-Super Star Cluster. As Black Holes develop and begin orbiting each other these will result in Black Hole Clusters. As Black Holes are in areas were the effects of the Dark Matter saturated Weak-Hyper/Higgs Field are in full effect, these clusters would begin the task of dragging modern galaxies together. Black Holes are also dragging Proto-Stars behind themselves as they attempt to align their orbits with each other, contributing to the deceleration and organization of Galaxies. Complex Triplets are therefore Complex Singularities in Complex Orbiting Relationships. What is *Inverse* and *Opposite* to protostar and matter orbital evolution? Protostar and matter entropies or Cosmic Radiation.

Scientific American Article April 2018

<u>Youtube Video</u>: Black Hole Swarms by PBS Space Time. (April 25, 2018)

<u>Reference Journal Article Posted in Nature</u>

Open Source copy of Article

Cosmic Radiation

Cosmic Radiation is the **HALTED** *process* that defines Extreme Entropic Complexities. Thermal Radiation is a **CAUSAL LOOP** that is also a *process*, being made from the extreme complex interactions of particles in matter which those particles don't reabsorb directly.

Thermal Radiation

Unpacking Thermal Radiation shows us that there are further lonizing and Non-lonizing effects. At one point during the Big Bang, the universe will go through an event causing the complete loss of lonization and then later, a complete Re-lonization. Non-lonizing Radiation can further be unpacked by describing its *Frequencies*, a *fixed* **CAUSAL LOOP**, with its low-to-high Complex Doublet Wave. And the Static Fields, a **HALTED** *process*, or wavelength that reaches infinity. This is the manifestation of a Simple Wave Singularity.

Gravitational Radiation

The Thermal Radiation effects lie *Inverse* and *Opposite* to Gravitational Radiation, an underlying *fixed*, and **HALTED** Super Complex Vector Wave that affects the Weak-Hyper/Higgs Field. This Super Complex Vector-Wave is a wave that moves the 'fabric of space.' Not only does this effect balance the system as it pertains to the Weak-Hyper/Higgs Field, but it was also this very occurrence that has recently been verified as detected by Caltech's LIGO project.

Caltech's LIGO project

In order to measure the movement of the 'Higgs Field,' the research teams set up experiments consisting of two large arms going out from a single detector, perpendicular to each other. The distance was great enough that these arms would wobble slightly if a gravitational wave went through them. These are scattered across the globe and were able to firmly detect and measure a Gravitational Wave that went through the series of them. These facilities, by the way, give tours if you are in the area. This is a link to their Detection Papers.

Protogalaxies

Protogalaxies allow for further evolution into Galaxies and then Solar Systems. It is these Solar Systems that give rise to what is termed 'Rocky' or 'Jovian' planets. These are all made possible by the *fixed* **CAUSAL LOOP** relationship that Proto-Super Star Clusters are developing with their Proto-Stars and the Black Hole Clusters. Black Hole Clusters are a *fixed* **HALTED** Complex Singularity themselves but they are active participants in the orbital orchestration of Matter at great distances from themselves.

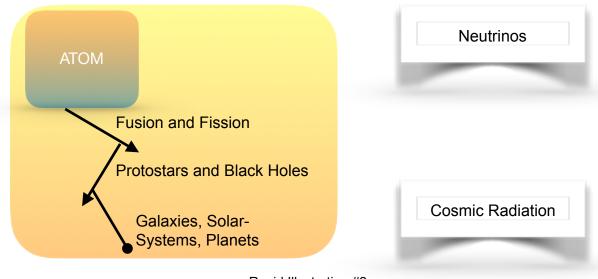
Proto-Super Star Clusters

Proto-Super Star Clusters are themselves a **CAUSAL LOOP** with a continuing *process*. From this, they are able to further evolve *stable environments* as they come under the influence of a swirling Black Hole Cluster's gravitational massive curving of space. These Proto-Super Star Clusters may be further unpacked by understanding the attributes related to them being Low-Mass Protostars, a *fixed* **CAUSAL LOOP** which feeds off a Protoplanetary Disk, a **HALTED** *process*. The first is Complex Wave Singularity being fed by the second, a Gravitational Wave falling inward.

Rapid Illustration #2

What occurs on **Planck Day Six** will result in nearly the Universe-System we recognize today. This means that **Planck Day Seven** should describe our current Universe-System as it is and will be. There are still some mysteries that need to be

explained and accounted for, such as Inflation, which the next section is able to clarify. What does exists might be simply thought of as existing in Matter-Filled Regions. Here's now an updated rendering of what has been created.



Rapid Illustration #2

Planck Day Seven (P-7)

{Complex-System, {Complex Triplet, {Complex Doublet, {Complex Singularity, {Trinary Set, {Binary Couplet, {Singularity, { } }}}}}}

Upon reaching **Planck Day Seven** the Universe-System may be distinguished by the regions that are either Matter-Filled or Matter-Less. As with the previous **Planck Days**, all the evolution, expansion, or dissemination was happening to mostly to the Electromagnetic Force with those reaction remaining under the main-state setting of: **CAUSAL LOOP**. The abilities of the Electromagnetic Force are exhausted and the Matter-Filled Regions, as we currently know it and see it, now become a **HALTED** process. This aligns with what researchers have already determined about the growth of the this Universe-System, it reaches a point in which all the 'sweet spots' needed for Complex-Systems to evolve will be exhausted. You can think of this as the universe infinitely expanding while everything inside it grows cold as all the stars, even the black holes, die.

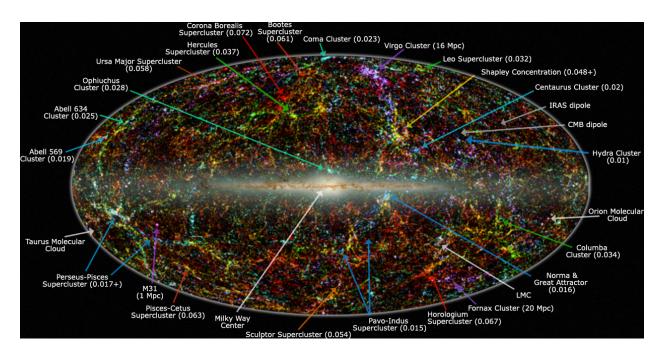
Major KEY P-7

Don't Panic and remember the concept of White Holes which are always being evolved so this isn't the end to future versions of this pattern/programs and therefore **LIFE**, does continue elsewhere. Just, no longer in this Universe-System. This universe will eventually just be cold and dark. This still might seem depressing to the human

mind which is sensitive to the concept of eternity being full of life or rather there being some kind of life-after-death in this same reality. An interesting concept arises from a thought-experiment presented at the end of this **Planck Day**, is there an evolutionary step for the Universe-System? This paper will ask and offer answers to this question by postulating the following: What is *Inverse* and *Opposite* to this pattern/program?

Superclusters

The Matter-Filled Regions are listed as *fixed* and **HALTED**. This concept may be further unpacked by describing the largest visible structures in the universe: Superclusters. These are a *fixed* **CAUSAL LOOP** and are *Inverse* and *Opposite* to the most influential occurrence in the galaxy, the Dark Matter saturated Weak-Hyper/Higgs Field, a **HALTED** *process* of finite Complex Relationships. Superclusters are Temporary Complexes of Galaxies full of Solar Systems with their own *Inverse* and *Opposite*, Super-Massive Black Holes at the center. Also, *Inverse* and *Opposite* to the potential of evolving *LIFE* on Rocky planets is the potential for a Super-Massive Black Hole to make a White Hole, extending the statistical chance for the evolution for a new Universe-System of LIFE.



"Panoramic view of the entire near-infrared sky reveals the distribution of galaxies beyond the Milky Way. The image is derived from the 2MASS Extended Source Catalog (XSC)—more than 1.5 million galaxies, and the Point Source Catalog (PSC)—nearly 0.5 billion Milky Way stars. The galaxies are color-coded by 'redshift' obtained from the UGC, CfA, Tully NBGC, LCRS, 2dF, 6dFGS, and SDSSsurveys (and from various observations compiled by the NASA Extragalactic Database), or photometrically deduced from the K band(2.2 µm). Blue are the nearest sources

(z < 0.01); green are at moderate distances (0.01 < z < 0.04) and red are the most distant sources that 2MASS resolves (0.04 < z < 0.1). The map is projected with an equal area Aitoff in the Galactic system (Milky Way at center)." Jarrett, T. H. (2004). "Large Scale Structure in the Local Universe: The 2MASS Galaxy Catalog". *Publications of the Astronomical Society of Australia*. 21 (4): 396–403.

Galaxies and Solar System

Galaxies and Solar Systems are the **CAUSAL LOOP** *process* evolving something slightly more impressive than stars, even though they are smaller. They are creating Planets. There are two main types of planets. <u>Jovian Planets</u> which are gas planets made of mostly low-boiling point materials. These can be described as Complex Singularities with embedded Complex Internal Vector-Relationships. They are also *fixed* **CAUSAL LOOPs**. The **HALTED** *process* is, therefore, the Rocky Planets. These are the ones that may potentially support further complex **LIFE** if developed in the habitable zone of a Solar Systems.

<u>Youtube Video</u>: Scientists Discovered the collision that created the Milky Way Galaxy, by Anton Petrov. (July 25, 2019)

Habitable Zones

Rocky or M-Class Planets in the habitable zone of a solar system allow for the accretion of heavier particles, creating composite silicates and iron-based surfaces and core. This allows for more complex evolutions to be developed on a seemingly stable surface environment when compared to the relative life span of Super Complex-Systems. This includes a form of evolution through a process of Natural Selection during the Rocky Planets periodic window for 'green' growth.

<u>Uniformitarianism</u>

There is still a manifestation of the embedded-processes going on with these planets and it is seen all around us. Geologist have long held to ideas of Uniformitarianism, that decoding the mysteries of the past could be done by looking at occurrences of the present. With this simple idea, simulated models are constantly being created to show logical explanations for various strata-formations. This allows for Geologist to act more like story-tellers, relating occurrences through a series of events explained through evidence. For an example, here is a link to a lecture series by the Teaching Geologist Nick Zentner that goes over the diverse transformations occurring in just one tiny region, the Pacific Northwest of the United States. (Website LINK)

Drake Equation

How many of these Rocky Systems could there be potentially supporting **LIFE**? This was the question that Dr. Frank Drake (b. 1930) postulated and answered with the now famous <u>Drake Equation</u>. There is still some controversy over using this equation because of the unknowns but if proper computer simulations are created for an Initial Big Bang, the resulting life cycle should be the stable foundation the Drake Equation needs to make acceptable predictions.

Cosmic Inflation

Back to the **Major KEY P-7**, what is *Inverse* and *Opposite* to the Matter-Filled Regions are the Matter-Less Regions. The Matter-Filled Regions are finite so the Matter-Less Regions are going to manifest themselves somehow to be infinite. There happen to be are two Matter-Less Regions and both cause inflation. The first is a Viral Parameter Inflation a *fixed*, **CAUSAL LOOP** caused by the Weak-Hyper/Higgs Field. The second is evolved as byproduct of gravity, Cosmic Voids a **HALTED**, *process* that causes tears in the 'fabric of space' to back-fill which assists the inflationary-process.

Cosmic Voids

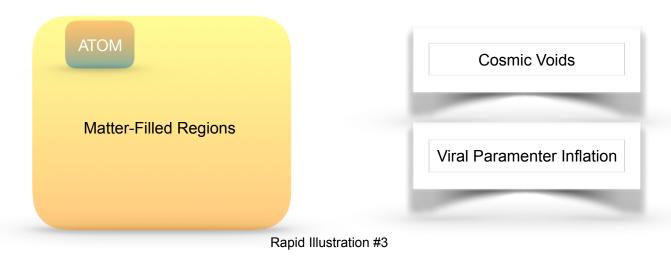
The Cosmic Voids represent regions of space that have very little to no energy left in them. The Weak-Hyper/Higgs Field will always be there but not much else except for what lies against the parameter of Cosmic Voids. Cosmic Voids are really that, void of Light Matter and Dark Matter. The effects, though, of the Dark Matter saturated Weak-Hyper/Higgs Field against the parameter of the Cosmic Voids causes the Superclusters to basically rip out the center of those void spaces.

The condensing together of Light and Dark Matter is *Inverse* and *Opposite* to the tugging that is occurring at the center of these voids, where the 'fabric of space' is attempting to 'pull away from itself.' Attempting to but can't because that is not how the Weak-Hyper/Higgs is modeled to function. The field merely backfills with more versions of itself, like a magic bolt of cloth that works to implement a flattening aspect upon the opposing space. As the Weak-Hyper/Higgs Field is pulled towards the condensing Light and Dark Matter, it begins virally back-filling the region with more Higgs, adding to the yet ongoing negative pressure. These Cosmic Voids give something else for gravity to work against and as this a **HALTED** *process*, these voids act as Finite Relationships. They will continue to grow but the rapid acceleration experienced earlier diminishes.

Visually, if a baker could cause a bread-dough to rise while simultaneously causing clones of dough to grow on the surface of the dough, that'd be scary and similar. Of course, any baker will tell you that this experiment will only work as long as the yeast have enough starches to eat. It's all about the fuel, even for bacteria.

Rapid Illustration #3

The parameter of the universe is also growing due to the viral nature of the Weak-Hyper/Higgs Field and is a **CAUSAL LOOP** that is *fixed*. This paper just refers to this as Viral-Parameter Inflation. The viral aspects act as a **CAUSAL LOOP** *process*, inflating the universe forever, after of course, a short period of Super-Inflation due to Cosmic Void Expansion. What now exists may be rapidly visualized as such:



This paper has now reached the end of its Big Bang Cosmology Series: the Boot is finished and all of **SPACE** has converged and diverged with all of **TIME**, as researchers currently record it. It is now time for this paper to answer the big question raised earlier: If the reader considers the entire stack of KEYS to be what makes our universe *real*, then What is *Inverse* and *Opposite* to our KEY Reality? There is a logical answer to this.

What is *Inverse* and *Opposite* to our KEY Universe?

This paper takes the thought-experiment of the *Inverse* and *Opposite* Universe a step further by postulating what could be *Inverse* and *Opposite* to everything this paper has laid out about the KEY Universe. This isn't a hard exercise as it's just building a list of knowns about our KEY Universe and then another list *Inverse* and *Opposite* from that. For visualization reasons, the term KEY was kept because the *Inverse* and *Opposite* of a KEY Universe easily fits against the description of a LOCK Universe.

The LOCK Universe

Continuing the pattern/program from **Planck Day Seven**, The LOCK Universe is a *fixed* **CAUSAL LOOP** that sits across the **HALTED** *process* of our KEY Universe. Where our KEY Universe has inflation or an <u>Infinite Direction</u>, the LOCK Universe would

have <u>Finite Direction</u> or a manifest as a limited or enclosed space. The LOCK Universe might also exist with a different TIME symmetry, meaning that moving into past of the KEY Universe might be where the present of the LOCK Universe begins.

Within our KEY Universe, there is only a limited window in which *LIFE* may be evolved do to this inflationary period. Therefore, the <u>Magnitude</u> of our KEY Universe is <u>Finite</u>. In the LOCK Universe, therefore, is an <u>Infinite Magnitude</u>, being able to manifest evolved *LIFE*, from its beginning to its end. This is possible with difference in **TIME** symmetry.

This paper also defines the <u>Dimensions</u> of our KEY Universe as being fractally embedded. Remember that fractal also means that you can't know where you are unless you know where the boundaries are defined. The *Inverse* and *Opposite* concept to this is something like side-by-side <u>Dimensions</u> or a straight-forward nesting style. The inhabitants would know where they were in the LOCK Universe.

The <u>Creation-Cycle</u> of our KEY Universe has no beginning or end. The LOCK Universe will, therefore, have a specific beginning and will come to an end when it is no longer needed. This gives a hint that there might be still something more going on then just a KEY and LOCK Universe.

Our KEY Universe actually exists as one of an infinite amount but only a finite amount of them evolve into LOCK Universes. Think of this as the KEY Universe having a higher version of a reality that itself may evolve into. If all the KEY Universes share an underlying uniformity and these LOCK Universes are created to balance the KEYS, then uniformity would also exist within the LOCK Universes. As the KEYS are made the same and under exacting circumstances, it is very possible that *LIFE* in the other KEY and LOCK Universes evolves identical to *LIFE* here, within our version of the KEY.

This concepts fits the ideas around parallel universe. Researchers are not able to detect other realities or a <u>multiverse</u> but what might have started out as science-fiction is currently being put forth as an option worth investigating and research. The math suggests that a multiverse could exist. The evolution of things like Hands and feet are just excellent ways to tie off biological-fractal systems and pattern/programs are in the end, logically predictable.

All throughout this paper the idea that concepts are being manifested in different dimensions and in different ways is a crucial characteristic of our KEY Universe. The Geometric Primer is just an embedded repeating pattern/program used throughout our KEY Universe so we should only expect to see its pattern/program represented and reproduced. Of course, in the KEY Universe, this is evolved randomly or statistically through evolution and entropy. In the LOCK Universe, systems and inhabitants would come into existence immediately as mostly evolved physical manifestations. This might be through some kind of *inheritance* or the difference in TIME symmetry as there would be different characteristics within our KEY Universe transforming objects into the higher reality of the LOCK Universe.

Could there yet be another reality higher, yet still *Inverse* and *Opposite* to the KEY and LOCK Universe? There is a hint of something connected to the LOCK Universe evolving this series into a Trinary Set of some kind. As this thought-experiment so far doesn't prohibit this within the already reestablished logic structure, this paper continues to build out the extended model.

What is *Inverse* and *Opposite* to the KEY and LOCK Reality?

In the previous explanation of our KEY and the LOCK Universes, this model continues the fractal pattern/program of exchanging the sub-state positions of *process* and *fixed*. The KEY and LOCK Reality will be combined and now manifest a *fixed* and **HALTED** series. This, on the surface, does agree as a general overview for their previously stated attributes if you were to now combine them together.

The CHEST Reality

Other things we know about the KEY and LOCK Realities is that their connection is predicted to be through an extended evolution going from a KEY Reality into a LOCK Reality. This is a Master/Slave Relationship. The *Inverse* and *Opposite* Reality would, therefore, be exhibiting Cooperative Relationships with the lower two realities. Also, this implies that this reality might complete this grouping of realities making it a Completed Evolved Set. Therefore this paper refers to this final stage as the CHEST Reality, a *process* **CAUSAL LOOP** that maintains the KEY and the LOCK.

Accessibility is next postulated and building off those ideas, the KEY and LOCK Reality would be described as having finite or limited access to the other Realities. It is evolution that transforms substances into these higher realities, implying that there are 'no free tickets.' Inverse and Opposite to this finite accessibility is an open-access-system that still

The CHEST Reality now stands at a good point for being a start of future LOCK Realities, or end depending on the TIME symmetry. Think of it this way: if the CHEST Reality has all access to everything, this includes the <u>source code</u> so for those inhabitants of the CHEST Reality this would be just an activity of copy and paste. If the inhabitants of the KEY Reality were wondering how the inhabitants of CHEST Reality behaved: it would be the same but just a higher dimensional manifestations.

The KEY and LOCK Reality have unknowns that can be worked out through logic if not immediately seen or detected. The CHEST Reality would have a component where nothing is unknown or inaccessible by at least one of the inhabitants. The inhabitants of the CHEST Reality are still gaining experiences but along a more linear

storyline that evolves infinitely. Meaning, the inhabitants aren't the ones evolving anymore.

For the CHEST Reality, this would all be happening to a finite population of inhabitants. Here, there would also be no death or permanent separation of the inhabitants. The KEY and LOCK Universes are dealing with infinite numbers of shuffling populations but they would only be evolving a finite number of their population into a LOCK Universe and further into a CHEST Reality.

The last characteristic of the final diagram listed on the *Inverse* and *Opposite* **Proof Series** is Power. What is meant by Power? Logic is power and the ability to deduce or glean knowledge from the surrounding environments ensure survival. This gives inhabitants of various realities the ability to be chosen by evolution through a 'process of natural selection.' In the CHEST reality, logic is so apparent that all the inhabitants couldn't function any other way.

In the KEY and LOCK Reality, there is only a finite set of observational powers gained by any inhabitant that can only be utilized for events within a certain range. These inhabitants have to gain logic, they aren't born with it. In the KEY reality, no inhabitant is born knowing or having an immediate comprehension of logic. In the LOCK universe, maybe they are not born with complete knowledge but they would have already gained a sense for it. The Human inhabitants of our KEY universe manifest logic as *truth*.

In our KEY universe this lack of direct contact with logic is what allows the inhabitants to experience an infinite amount of 'Free Will.' The inhabitants are able to work out logic and evolve themselves while failure to do so is still a viable option. When certain inhabitants have gained a strong relationship with logical/truth, they are able to evolve in the next Reality. The *Inverse* and *Opposite* is true for the CHEST Reality. Coming into this Reality, the inhabitants would already be preformatted with logic, meaning, their lives are fated. Their 'story' or the series of events that unfold in the CHEST reality happens in the same linear fashion, albeit, evolving infinitely.

The Chicken vs The Egg

What started this series ending in a Chest Reality? This is speculation and slightly whimsical but if you think of the Chest Reality as a Cosmic *Egg* then maybe it comes from a Cosmic *Chicken*. With **that** Cosmic *Chicken* possibly coming from an Uncosmic *Egg*. What is an Uncosmic *Egg*? Well, a KEY or CHEST reality that mutates from a different Reality Series altogether. KEYs eventually evolve a CHEST from the natural pattern/program that just happens to be stable. Random chances do allow for anomalies in our own world so maybe it is allowed in that other Reality. There is the case with the harvested cells stolen from Henrietta Lacks (1920 - 1951). These became stabilized mutations capable of propagating infinitely taking on a *LIFE* of their own. Even without the patient's permission, unfortunately.

At this point, if there is something higher or outside the KEY, LOCK and CHEST series, most likely we are either an embedded slave characteristic or exist in a self-sustained bubble-universe. If outside contact of this series is attempted, it would best be made to the inhabitants of the CHEST Reality directly. So, this paper leaves this topic here as a problem for them to solve.

If this paper has done its job, the reader should have a completed idea, from start to finish, regarding where matter and energy came from and where their evolution could potentially be going. Within our KEY universe, all of the Complex-Systems are manifesting the various dimensions of this universal pattern/program based on statistical probability. Now that the complete construct of realities are established, the various other manifestations of the Geometric Primer by known systems may be understood further in this new context.

The Science and Art of Dimensions

Physics isn't the only field that tries to capture, describes or tries to understand Quantum phenomenon. In early 1800s pharmacology (Link), Quantum satis used to be written on prescriptions to indicate 'waning-use.' The instructions being loosely: use what you need but no more. Julius Robert Mayer (1814-1878), one of the founders of Thermodynamics, used the word Quantum in an early formula found in a letter dated July 24, 1841. Max Planck (1858-1947) went on to describe energy quanta which earned the Noble Prize in Physics in 1918. Albert Einstein (1879-1955) would build on the work of Planck, viewing Plank's work as some would say 'realistically' and cleaning up Plank's messy formula (E = h v) for the one we all recognize today (E= m c²). It was for this achievement that Einstein earn his Noble Prize in Physics in 1921.

Quantum is a complex mathematical idea but for some it just relates to something that is small, its abstract mass being defined with the unusual qualifier: Discrete. Quantum is really a label trying to imply the least possible amount of mass an object will ever have, not for any particular object, but for all of them. If the reader remembers the section on Entropy, they will start to see why these two concepts are related. Quantum can therefore be thought of as a standardization or notation for entropy. Quantization being the attempt to map out a large set of entropic variables by using a countable, smaller set. Quantum Mechanics becomes no longer a hard subject, just a heavy one.

Luckily, understanding what is meant by Quantum can be experienced through another manifestation of the Geometric Primer that can be seen in Art. Even art offers us something very profound which is also based in mathematics. The concept of Perspective. Here is what Plato's Republic, Book 10 has to say on the subject:

"Thus (through perspective) every sort of confusion is revealed within us; and this is that weakness of the human mind on which the art of conjuring and of deceiving by light and shadow and other ingenious devices imposes, having an effect upon us like magic... And the arts of measuring and numbering and weighing come to the rescue of the human understanding – there is the beauty of them – and the apparent greater or less, or more or heavier, no longer have the mastery over us, but give way before calculation and measure and weight?"



Big Bang by Dick Termes (2002)

Perspective

In art, dimensionality is called by the name <u>Perspective</u>. Many paintings and drawings use a horizon as an anchor to define distance and the sense of space. But there isn't a horizon everywhere, like underground or in actual Space. Instead of allowing each artist to invent whatever potential horizon they want, the science of art-theory teaches an artist how to use something that is universal in any environment: the math their eyes see with. Most people with usable eyes just use them and progress through their day assuming that the flat-projection their brain creates is a round-reality. There is more if you pay attention. There are various points of perspective but this may get confusing for any student until it is explained with good graphics. The best way to experience this is visually and with the guidance of a good teacher.

Art has more math in it than some realize. Not all art students like or can get through the math explanations, many having a talent for being able to naturally pick up perspectives. This isn't helpful for artists prone to mental-blocks as this is their only source of knowledge and therefore ability. Anyone can learn math, though, which means anyone can learn art techniques and be taught how to apply them artfully. By learning proper techniques, artists are freed from an otherwise self-restraining lack of self-discipline.

The Painter <u>Bob Ross</u> (1942-1995) preached this to American audiences during his show <u>The Joy of Painting</u> (1983-1994). Most people create art because it's enjoyable as an exercise or brings peace but its accessibility comes from the fact that it may be mastered with practice by anyone. The fame of artistry doesn't always come from the flawless execution of a technique, either, but from the courage and revelations that are derived from breaking with tradition once it is learned. Some like <u>Vincent Van Goth</u> (1853-1890) are not appreciated for their break from tradition during their lifetime. While others, like <u>Pablo Picasso</u> (1881-1973) get to revel in their fandom from being a deconstructionist despite personal life choices. If you want a living master of projected perspective who is also a teacher, than a good example is <u>Dick Termes</u>. Located out of Spearfish, South Dakota, Master Termes creates <u>Termespheres</u>: paintings on spheres. Master Termes is a remarkable artist and teacher and the below images are taken from

his lesson <u>Understanding 6 Point Perspective</u>. The above sphere is entitle <u>Big Bang</u> (2002).

Zero-Point Perspective

'Vanishing points' change parallel lines so if there are no vanishing points there are no need for mapping parallel lines. Can you have a picture without parallel lines?

Sure. A fractal scene like the ones rendered in nature can be said to have a **Zero-Point Perspective** because there are no parallel lines. Staring down upon a pile of leaves would hardly hint at the potential depth of the pile. The fractal chaos of a leafpile, with no parallel lines, just looks like something that might be textured. No other information can be implied about it other than what you are actually seeing. When an art critic claims a piece is 'boring,' this is normally what they are referring to: the piece doesn't offer or bring in outside perspective.

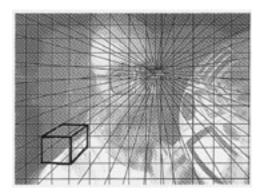
A famous zero-point perspective artist was <u>Jackson</u> <u>Pollock</u> (1912 - 1956) who did drip paintings. These are used in art and math classes to describe fractal natures. What does that mean? It means one small part of a drip painting has all the same pieces to other parts of the painting. If a viewer were to be shrunken down and placed to walk upon the canvas, they would have no idea where they were. All the landmarks would be similar. Unless the viewer were near a boundary or the edge of the painting, they would remain lost. When perspective is added in art, a destination is usually laid out and therefore the viewing experience might be considered limited. This ability for a viewer to get lost forever in a work is what made Pollock so different and highly popular. This painting here is one of Pollock's earlier drip paintings, Full Fathom Five (1947).



Full Fathom Five by Jackson Pollack (1947)

Due to the fractal nature of **Geometric Primer**, being at this zero-point is very similar to what it is going to be like at the highest point, just less intense and better organized. This is similar to the Trees versus the Forest analogy. And while a tree is interesting, the evolution of a tree into a forest is impressive. This is also similar to the Empty-Dimension with its unlimited potential.

One-Point Perspective

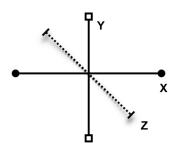


It should be commonly understood that objects that are nearer to us appear larger than objects that are further away. When creating art you do this intentionally, making certain objects larger and certain objects smaller, in order to create the

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appearance of depth. Using a grid helps. When an object does seem to be pulled or points to a single vanishing point because of distance, it is said that the picture has gained a **One-Point Perspective**.

Geometrically, think of a <u>cube</u> for the main focal object, which has 3 sets of parallel lines arranged generally 'up to down', 'left to right', and 'front to back'. These terms are relative and may also be manifested mathematical. On a simple three-dimensional <u>Cartesian coordinate system</u>, this would be similar to the X, Y, and Z axes. With **One-Point Perspective**, two sets of those parallel lines remain fixed -



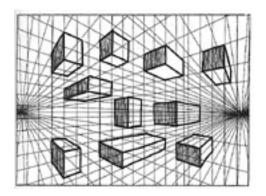
X, Y, Z Cartesian Coordinate System

the ones going 'up to down' or X-lines and 'left to right' or Y-lines. The lines going 'front to back' or Z-lines are no longer parallel.

Asymmetry is eye-grabbing because our brains like symmetry but this symmetry has changed so a viewer will wonder what is going on. These once parallel lines are now touching, with the Z-lines pointing 'back' into the piece. These will all verge together at a location called the vanishing point, because these are where the lines all vanish to. The Z-lines coming 'forward' out of the piece are getting farther apart. That is very unparalleled.

With the next following Point-Perspectives, the additional *Points* will give us 'vanishing lines,' with specific angular degrees. All the actual lines are defining specific rules, even as they are being directed to the single vanishing point, but what might seem like 'imaginary lines' will appear. It's by connecting this vanishing lines with mathematical degrees that an artist is able to anchor the image into a recognizable reality.

Two-Point Perspective



Two-Point Perspective

Imagine: you are walking on a road and come up to a fork-in-the-road. You can't go straight ahead, instead the road leads to the left or to the right, vanishing in either of two directions. Adding this additional vanishing point creates a **Two-Point Perspective**.

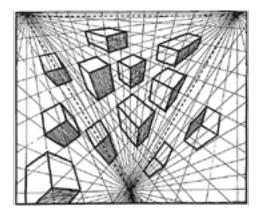
Geometrically, our zero-perspective cube had 3 sets of parallel lines. **One-Point Perspective** changed one set of those lines and **Two-Point Perspective** will change two sets of those lines.

The piece will now only have one set of parallel lines remaining - the lines going 'up to down.' The vanishing

points could also said to be at the same 'eye level,' which creates the allusion of a

horizon without requiring a physical one. This eye-line is said to represent a single 90-degree line. The world can be split into a top and a bottom.

Three-Point Perspective



Three-Point Perspective

Imagine you are back at the fork-in-the-road, but you notice something in the street. Surrounded by traffic cones is a hole in the street. Your options for moving are now to the left, to the right, and if you want to brave the dark, downward. Without trying, you've made it to **Three-Point Perspective.**

The Nadir is the term meaning the downward vanishing point, or the hole. What if you covered that hole but then an alien spacecraft flew over and tried to beam you upward? That **Three-Point**

Perspective direction would be called <u>The Zenith</u>, which is the vanishing point that appears above an object. So far you have been able to create all of these

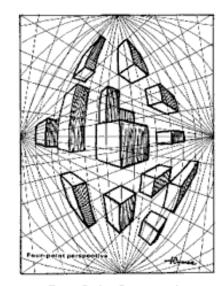
lines, both parallel and vanishing, with a straight edge ruler. **Three-Point Perspective** creates a triangle measuring 180-degrees, double the 90-degree line measurement from the **Two-Point Perspective**.

Four-Point Perspective

The alien spacecraft tries to beam you upward but releases you, finding you too superior of a subject to steal. Instead it hovers around above a gathering group of people who are jumping down into the hole. Someone must have uncovered it when you weren't looking. You, the observer, now have a **Four-Point Perspective** distracting

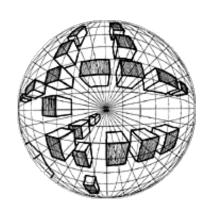
your attention. If you were to stand to face the whole scene at the fork-in-the road with the alien spacecraft lifting up people as some escape by jumping down the hole - your vision wouldn't be showing you an image with straight lines but with lines that have been lensed or curved. You can only see a small amount of your vision clearly, the rest is lensed around the contoured center of your eye. Your vision is not as clear or as focused as what you see in the exact center.

The vanishing lines are joined by contour lines going to the Nadir and Zenith and are shaped like eyelids. If the Nadir and Zenith are not used but instead the opposite two points are either North to South or East to West, this is referred to as a continuous **Four-Point**



Four-Point Perspective

Perspective system. Still totaling 180-degrees, these Four-Points appear head-on symmetrically and are normally 90-degrees from each other.



Five-Point Perspective

Five-Point Perspective

Up to now, we have been able to reproduce all of the effects of perspective within the confines of a linear graph or squarish piece of paper which you can still do but with a lot of effort. A shortcut in capturing 180-degrees in **Five-Point**

Perspective is using a more dynamic shape: a circle representing a half dome.

Now with two sets of contouring lines compared to only the single contouring line of **Four-Point Perspective**. In addition, all the straight inwardly drawn lines coming out from the circumference of the circle are all vanishing towards a center. What is achieved is the **Five-Point Perspective**.



Imagine being in a forest with tall trees all around you and stopping to look upwards at the sky - this would give you the same visual effects. Around the circumference of the circle are the four vanishing points North, South, East and West, with them all vanishing into a fifth, the zenith.

Six-Point Perspective

With Five Points we are able to capture 180-degrees of a view by essentially looking out through one half of a sphere. What does a **Six-Point Perspective** have to offer? The other 180-degrees or the other half of the sphere. If you create a picture with all the vanishing points coming towards you and then connect a second picture that shows the view from that point to behind, you've gained the complete 360-degree view.

This is where the normal art lesson ends and it is easy to assume that this is where it should stop. Looking at the image above what is rendered is a drawing that shows in only two images the complete front and back of a person. A 360-degree view. What more could be available? What about even more movement showing even more time and space, of course.

Seven-Point Perspective

A **Seven-Point Perspective** would be a 360-degree view of space as that space changed over time. Master Termes's Perspective lectures stop at Six-Point Perspective but it is easy at this point to correlate what it should be. A couple of carefully spaced video cameras can capture and record **Seven-Point Perspective**. In this sense, it isn't that hard. It could also be equated to an art piece that had a full understanding of the events during all stages of time.

Uncovered vs Discovered?

Whether or not humanity has been making discoveries or just uncovering the truth has long been debated. Are the various points of perspective invented by a human mind or distilled from a greater relationship? This paper believes that all of science has been <u>Uncovered</u> and distilled through the Human-System from this pattern/program or as a corruption from a failed attempt. PART ONE has been focusing on establishing this pattern/program in fields testable outside of the Human-System.

PART TWO crosses this boundary and delves into the Human-System offering a more direct way to infer effects. Not just with known and accepted evidence but through each readers set of personal experiences. The further insight offered is not just into Specialized Complex-System but how they continue to only be able to replicate this same pattern/program.

PART THREE will then detail those Human-System renderings that are not considered completely scientific or repeatable. These instances or events need themselves to be verified against a pattern/program to explain their purpose or level of correctness. These topics are not just the esoteric renderings of inspired writer but also refers to the fields of Philosophy and Ethics.

Currently, the Human population is at various levels of disagreement with each other with the consensus being that the only solution is for people to 'agree to disagree.' This assumption and response came from the inability of people to work hard enough to solve their problems as it was assumed that there was no universal solid ground for them to stand on. As this Universal Geometric Primer is accepted, then the rules governing its treatment become universal as well. As long as the memory of suffering holds, the Slaves will see they do indeed have a right to cooperation. Biases will be seen as biases and truth as truth.

PART TWO: Specialized Complex-Systems

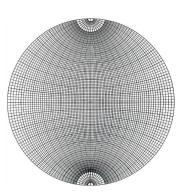
"All science as it grows towards perfection becomes mathematical in its ideas."

Alfred North Whitehead, 1911

If you have finished PART ONE, Introduction into Complex-Systems, you might be curious how all this geometry equals a living person. Those mysteries and others will be unfolded next. In order to understand how the Universe-System directly correlates with a Human-System, the concept of a primer will be reviewed again. Afterwards, accepted scientific terms and evidence will be laid out according to the rules put forth by Geometric Primer and established in PART ONE. Once the Human-System parameters are defined, additional correlations will made with Computer-Systems. Finally, treatment and measurement of that system will be discussed. After PART TWO is mapped out, PART THREE will pick up and start by connecting and explaining the Super-Specialized Complex-Systems created by Human-Systems. This section reviews the similarities between all human contrived edifices such as physical communities and structures, legal boundaries and restrictions but also mental philosophies and religions.

Primers

Translating ideas across dimensions, fields, or concepts isn't a new procedure in science and was a concept an author of this paper first encountered in a geology class on crystallography. When studying crystal shapes, the class was taught how to use a device called a Stereograph to make a Stereographic Projection. With a stereographic net like the one pictured here, the students were instructed on how to plot the internal three-dimensional crystal structure of an unknown mineral onto a two-dimensional field a.k.a. that sphere-net thing glued to a large piece of cardboard covered over with tracing paper. Onto the tracing paper we would attempt to translate or render what we were seeing, leaving plot markers where angles moved a facet away from being spherical. With



Stereographic Net

this training the students were supposed to be better able to figure out what the mystery crystal-object we were holding in our hands actually was. Even more importantly, we had a scientific way of communicating that understanding to others. The grander lesson

being that, knowing something came down to how much you could see, measure, and relate of its attributes to others to get outside verification from a better trained mind.

Here is the Geometric Primer with some aspects missing like the Unknowns, TIME, and the four forces. This image is more blank but will work for our purposes. While it's very symmetrical, it might otherwise look boring since it isn't doing anything. Before this paper applies the underlying Logic-Sequence to the Human-System, it will first explore again how some of the geometry manifests into the organic dimension.

Hypothetically, if we seek the rendering of such an answer as to *What does it mean to be human*, the reader should have gained upon finishing, personal insight into the question as well as calculable potential value for all human life. Phillip K. Dick (1928-1982) extrapolates in his dystopian novel that became a movie, *Minority Report*, that once you have insight into your actions, (plot spoilers) you can change them. Since our readers are *Human*, the truth in what is written should allow the reader to manifest even more truth about themselves personally. That is the first witness to the self-evident truthfulness of this Geometric Primer as a model for Human-Systems. With a warning: you might learn some unpleasant things about yourself on the journey but don't be discouraged - please keep reading. There is good news such as how to make changes if you have found yourself inadequate and want to get better. The second witness is that it matches modern neurological evidence.

In further sections, we will compare various 'skins' to each other which will allow our readers a new experience of possibly having deeper insight into a subject then they have never reviewed before. The second 'skin' compared to the Geometric Primer will be Computer-Systems which goes to confirm that our human-model could be made 'Turning Complete' and that the Geometric Primer itself has proper internal Logic. Thirdly, we will use the primer to see if it could offer a solution to some of the issues relating to why our universe seems to allow paradoxes. This leads us back around to quantum mechanics and general relativity. There is still a section of Unknowns, left specifically for last with the purpose of delaying publication until after a general positive consensus for the current known material has been established.

What does it mean to be Human?

While religions lay claim to the source of this truth, it has yet to be revealed in such a way that doesn't take a <u>Kierkegaardian</u> leap into faith. This paper isn't going to cast a negative connotation around those that lack understanding or those that have faith that the answer will come. These positions are equal points and have the same trajectory resolution, both requiring a transitory journey from not-knowing to knowing. Having faith implies that you believe something is there, which is simply an optimistic attitude. Being skeptical or even pessimistic are therefore just attitudes that lay naturally upon that spectrum, not against it. The growth-process is messy, and just like childbirth, what you are left with still needs time to evolve further.

To begin, this paper starts this conversation and translation of abstract concepts of the human-mind and physical-self; the pieces of which are not invented. Some might think of them as 'the soul' and 'the body,' but these words are too esoteric for science.

They aren't bad words, they just are not specific enough but there are other terms we can use that are similar and grounded in accepted science.

The Mental Self

The first three terms we are going to use for our model are The Id, The Ego, and The Super Ego. <u>Sigmund Freud</u> (1856-1939) referred to these as the 'mental life' and those three parts are standards in <u>The Freudian Model of The Human Psyche.</u> These will be the terms used to represent *The Mental Self* and come from the field of Modern Psychology. The Mental Self represents the Quantum Realm, **Absolute Space**, and also the internal-processing side of Human Reality.

The Physical Self

There is also *The Physical Body* as a whole, containing the endocrine system (which includes the Enteric Nervous system), and the whole brain called The Intellect. The Intellect is further embedded with parts of *The Mental Self*. Understanding of our physical self is based in the studies of Anatomy and Physiology. There are still modern day discoveries being made even in these long studied fields, including the more modern day field of neurology, but readers will only need a basic understanding to follow this model. The Physical Self represents the General Relativity or the Master/ Slave Reality, **Absolute Time**, and now also the external-processing side of Human Reality.

The Mental/Physical-Continuum of Self

If you exclude the central positioning node for a moment and try focusing on the two half-spheres. The sphere's equator is the biggest circle drawn if you are having trouble seeing it. There are three aspects connected to a top pole on one half, and three aspects connected to the opposite pole. Nothing surprising there. The three aspects are shown connected along the surface of the sphere to their pole. This can be thought of as database or a repository point for their data. There are two of them, one for the Mental-Self and the other for the Physical Self. With a little color-coding, this paper reduces the Geometric Primer to a more simple illustration.

The Geometric Primer is perfectly symmetrical so it doesn't matter where you start, as long as you place the *Aspects* in order. Visually, what you are looking at in this picture is the Geometric Primer with the largest perfect circle being the equator of the sphere. The *Aspects* are color-coded and the reader should see that there are three spokes going to Orange Circles and

Super Ego

Endocrine System

Id

Intellect

three spokes going to Purple Circles. All the spokes meet together in a center, which represents the *central node*.

The Central Node will get a slight name adjustment for this system and will be referred to as *The Central Core*. The Central Core still connects independently to the top and bottom of the sphere giving it a unique but limited perspective. A more detailed explanation will begin shortly but it is good to understand at least its basic perspective.

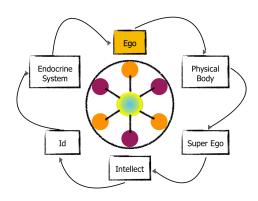
Six of the seven *Aspects* representing the Mental/Physical Self are displayed in the correct directional orientation: The Ego, The Physical Body, The Super Ego, The Intellect, The ID, and lastly the Endocrine System. The logic behind the ordering will become self-evident as it is explained. After the details of the Geometric Primer are aligned with the Human-System, the next step will be to detail the manifested sphere's ability to *Spin*. That's when the fun starts, or in other words, the answers to the questions may be generated.

Introduction to the Human-System

The Ego

Answering: What is Real?

The Ego is from the Freudian Model of Psychology and the *Aspect* responsible for rendering for our Human-System the concept: What is real? How is this done? The human brain is known to act as a storage bank of data points. These data points are taken and and organized by these *Aspects* with the Central Core acting as an internal-checksum. This checksum procedure will be explained when this paper reviews the role of the Central Core in more detail.



Each *Aspect*, in trying to answer its question, is able to go into either a receiving or questioning mode in an attempt to resolve an answer. This means that each *Aspect* is constantly trying to recall previous answers, verify existing information, or placing requests for new information to be updated.

The Ego interacts mostly with an already accepted set of data points previously metabolized by the system's internal-processing. These were used to establish and answer the previously asked question by its *Inverse* and *Opposite Aspect* The Intellect which will answer "What do I believe?" Looking at the illustration here, notice how The Ego is situated across from The Intellect. This *Aspect* will be responsible for hard coding what each Human-System accepts as real.

Developing Biases

Every Human-System has an Ego, meaning, everyone *is working* and *has worked* to build up their own set of data points, instructions, or ideas that they navigate the world by; their own set of beliefs, rules, and conceptualizations. These *internalizations* don't magically appear but are cultivated, harvested internally through a life's environmental events, cyclically, and this Ego uses these self-creations to render for it: REALITY.

Dunning-Kruger Effect

Philosophically, we know these renderings as 'biases' and they play a large part in the success (and failures) of all of our Human-Systems. There are outside proven truths that our Human-System can be denying and not even be aware of it - resulting in the Dunning-Kruger Effect. If a person doesn't have the right rules for internally-processing reality truly as it is, they are going to say things and act in a manner that isn't calculated as being predictable by on lookers with a different set of agreed upon rules. Without understanding all the previous data points that have been reviewed or accepted, differing behavior can easily register as out-of-place or "crazy" by others. For those participants, they may not intrinsically see the value in respecting specific boundaries.

The Ego is the reminder to the Human-System that they are separate from the environment though still connected to it. As a tool, it allows for exploration and bravery but left unbalanced, a Human-System attempts to interpret data points through a biased filter. Being able to continue acquiring and properly apply data points is crucial in any system but the Human-System can gain dismissive subroutines which may stall or halt its evolution.

Looking back at the **Geometric Proof**, think of the unknowns represented in Image Two. Human-Systems start out with zero-data-points but the more data they take in, the larger their geometric parameter grows. This resembles the logic state: the more you know, the more you know you don't know. In response to all of these Unknowns is the Ego fearlessly demanding answers or asking its question every moment of the systems internal-processing lifecycle. It is also not the only *Aspects* doing this.

All of the *Aspects* are vying for main attention. This easily explains internal-processing overload and its accompanying manifestations. Having such an automated and active internal dialogue means that each Human-System is meant to become self-disciplined in order to reach their maximum potential. All of that activity also means that down-time is very valuable. Stress should be moderated and external checks and balance system regulated appropriately.

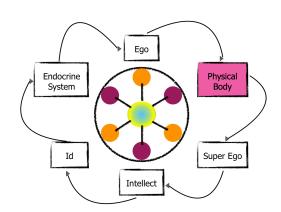
It is a harsh reality Human-Systems exist in. There is a growing field of unknowns and failure might mean death. How does anyone decide who it trust? This might explain why Human-Systems needed to evolve to be such social creatures. It is in the best interest for our evolutionary to gain the most trusted *associates* who are able to communicate the most recent, rational, and sobering updates. This may not be good news for introverts, but historically, having your friends give you a heads-up on where the human-eating tigers really were rather than not, could have meant the difference between a family picnic or early genetic culling.

The Ego also implies that if Human-Systems evolve more quickly by working together, that as a species in a modern era, we should be focusing our energy and efforts on continuing to evolving that external-process. Working together with alacrity isn't a concept current embraced or taught by all levels society which instead still touts selfishness or nationalism as the core of most of its economic and philosophical practices.

The Physical Body

Answering: How do I behave?

Once our Human-System gains a 'point of view," data point, or bias about what is going on with *reality*, that system gains the ability to potentially navigate that *reality* with 'insight' or better put: *act with intention*. Let's say you want cookies. Behind that door is a jar of cookies and to get it you must open the door, go to the other side, see the jar and retrieve the cookies. Hazah! Done. And how? The mechanical energy expelled by The Physical Body.



The Physical Body doesn't represent a Mental-State (Freud) or rather a Psychological-State. Unlike the Ego, the Physical Body is a Physical-State. Human-Systems are embedded within a Physical Body which in turn has physical *Aspects*. The uniqueness of these two-selves and their attachment is the core manifestation the Human-System reality, the Physical Body being the vehicle of containment.

The subtle internal musings of <Where am I supposed to stand?> <Where do my hands go?> <This smell doesn't seem natural?> are manifestations behind one-third of our Human-System's physical-self and defines the output rendered as Human Behavior. Behavior is about testing and navigating the environment, using tested actions and reactions, striving for minimum energy loss to get internal goals accomplished.

Behaviors are responses in our Human-System which works in a *self-questioning* model and needs this physical interface to do some of the grunt-work like eating or moving.

All the time the Physical Body is posed to be the engine that is ready to answer questions by physically reacting. There are many abstract ideas regarding where behavior comes from but no scientist or researcher has been able to pinpoint it previously. For a historic good attempt, see the Journal of Biosciences, January 2002, by Patrick Bateson with the University of Cambridge: Where does our behavior come from? In it, Bateson talks about the unknowns that occur during the developmental cooking stage and the need for something more simple in the future of science to better explain things.

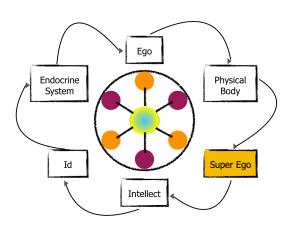
The Physical Body is also doing math which manifests as something called hand-eye coordination. The visual input received by the eyes must not only translate properly into an action response from the hands or feet, but it must do so with the proper speed, distance, and strength required. This type of math is picked up from experience and it helps the Physical Body properly maneuver around the external reality.

The Physical Body, while having a brain embedded inside it, doesn't have access to higher thoughts itself and instead has reflexes that get programmed into muscle memory. As this model unfolds it will become very apparent why self-discipline and proper care and treatment of the Human-System are required for optimal long-term sustainability. A hint at this potential crisis might be guessed from the Physical's Body most influential *Aspect*, it's *Inverse* and *Opposite*, the ID.

The Super-Ego

Answering: What does this mean?

Once our Human-System starts exerting a force, its mechanical energy, on the environment it is now qualified to receive 'feedback.' "What goes around comes around," as the saying goes. Feedback shouldn't be anything to be afraid of and there is even an *Aspect* ready to receive and regulate that data. The Reasoning Center of your psychological self is already known to be the Super-Ego. (Wikipedia: Id, Ego, Super-Ego)



The Super-Ego is in charge of accepting or decoding the reason behind clusters of data points or events. Just like the Ego and the Physical Body before it, the Super-Ego is powerful but also limited in its options.

Anything the Super-Ego reasons out is internally-processed and stored in its database from which it continuously accesses to further build it's own set of reasoning-filters. Do you see the inherent problem there?

These filters protect the personalized collected set of internally accepted *Truths*. Thus, our Human-System may only make 'the best choice for itself' when comparing 'itself' to this restricted, previously internalized dataset. This means Human-Systems may innately make profoundly large mistakes, metabolizing reality-countering-truths that transcend many intellectual levels, without ever gaining a tiny hint to the incremental failures involved. The Dunning-Kruger Effect strikes again. Or as portrayed in pop culture by the character Chidi from the NBC series The Good Place (s2, e4), (as portrayed by William Jackson Harper,) states humorously about what is built: "A Jenga-Tower of sadness."

This, of course, is to the exclusion of data updates and outside interventions which adds to the argument for why Human-Systems continuously need due-diligence or peer review for personal ideas. Again, nature is showing us that it is good to be apart of a group, working with alacrity. If the work is good, people become *saner*. The American futurist, <u>Jacque Fresco</u> (1916-2017), coined the phrase "unsane" as being a state where a person's previously accepted ideas have simply grown out-of-date. Everyone starts out blank and they grow based on the many data points they are given and how well they are physically set up to take ongoing updates.

Don't think you suffer from biases? Harvard created a test and proved that even if you are told you are taking a test to show you have a bias, you will fail. Why? It's because it test for a bias against the African American population that is very subtle and the results have been ground breaking. You may think you are aware enough to not be seen to be biased but please know that 99.9% will fail this test - no matter their ethnic background. This information-infection is already systemic. CLICK HERE FOR HARVARD IMPLICIT BIAS TEST WEBSITE

The Super-Ego, on top of having the large responsibility for reviewing new information, is helped or hampered by another simple but that dynamic concept of this model. The *Inverse* and *Opposite Aspect* in this case is the Endocrine-System.

Ego Physical Body

Intellect

The Endocrine System controls 'the feelings,' a Physical-State that is encompassing to the majority of rest of the *Aspects*. As experienced by teachers

everywhere, if a student is not in the right total-chemical mindset as set forth by the Endocrine System, then that Super-Ego's highest reasoning potential for overall learning is reduced, significantly. This manifests as agitation, short attention-spans or a seeming unwillingness to learn. All Human-System's need and want to learn or gather data but young ones lack the vocabulary to express their needs in order to receive resolution. If students have unresolved chemical distractions, regardless of original

intention, the system fails to code new data. Human-Systems have a demand for equilibrium, that Central Core, which must have its needs met before new information can be properly metabolized for hard-coding.

The *Inverse* and *Opposite* of each *Aspect* are not the same as each other, but they are still doing roughly the same style of programming, like a mirror projection. What does this mean for our reasoning center? As some might have already experienced, the *'reasoning'* center may signal a feedback loop with the 'feelings' center. Which, in turn, propagates more bad reasoning which propagate worse feelings and worse thoughts, and so on... All the while, incoming corrective good-thoughts are ignored, dismissed, or filed away improperly as Rejected. This can become immediately apparent or occur slowly over time as new ideas are digested – either way, our Human-System is susceptible to malfunction on a level that can not be self-corrected and may require *external-intervention*.

A Human-System has to be in the proper physical 'mindset' or alignment to learn anything and even then, a person can or might hurt themselves with their thoughts. René Descartes (1596-1650) stated things very similarly and was known to believe that much of what was wrong with reality came down to people mis-using their minds, building confusion, and internally-processing their own internal-illogical.

This *Inverse* and *Opposite* effect really implies, within our Human-System, that a certain level of self-discipline and self-awareness is needed to keep our Human-System "balanced." **Balanced** being measured as a state where information-processing is judged based on its merit and not on the systems attitude. To accomplish this, a Human-System must learn to control their internal-processing focus, aligning all the different *Aspect* so they work harmonious together.

<u>David Foster Wallace</u> (1962-2008) described something similar in his speech *This is Water:*

"It's a matter of my choosing to do the work of somehow altering or getting free of my natural, hard-wired default setting which is to be deeply and literally self-centered and to see and interpret everything through this lens of self. People who can adjust their natural default setting this way are often described as being well-adjusted, which I suggest to you is not an accidental term."

The Super-Ego may internally-process new information and it may map it out to a large extent without errors. At the end of the thought-process, though, the next *Aspect* in our Human-System could still reject a new, very true idea simply because it doesn't match a core, fundamental, pre-established self-truth it has already been given. There could be many data points around self-identity which are connected to the ideas that make a person who they are. Changing a single point of information can make fall a tower of weak ideas built on top of it, *crushing a soul* or in the least, a Self's understanding of reality. An exorcism of the mind is not a small thing and such

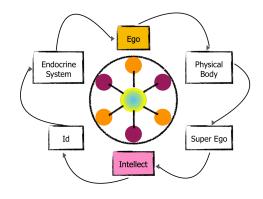
fundamental shifts may render individuals catatonic while their minds work to reestablish meaning. For a Disney version of this concept, see the movie <u>Inside Out</u>.

The Intellect

Answering: What do I believe?

Once the Super-Ego has come to a conclusion, that data-packet is sent through the Intellect for permanent coding into your Brain.

Much of the space in the brain is taken up by regions controlled by the Mental-Self but there is a physical part of your brain where data is stored. The Intellect is a physical-state and does the work of making the chosen 'bias' becomes apart of the system. Similar to how the food a person eats becomes a part of that person, this is the physical act of those chosen thoughts and bias's becoming apart of the system. It's a myth that the brain gets wrinkles when it learns something; what you are gaining are 'Synapses' or additional interconnections



with supporting blood flow. Your brain gets more dense, and for neurons, this means faster connections.

The Intellect is the ready source for the answers requested by the Ego and this position is why it is hard to have an *intellectual conversation* with a system that is being egocentric. The Intellects *Inverse* and *Opposite* is working to protect the already existing data, not change it. Depending on how deeply a data point is embedded and how many other data points are connected to it, the Intellect may dismiss incoming data at any time and decide that it doesn't need to even review it.

This level of data-point-rejection is profound and not always understood by those who are undergoing it. It manifests as a mental pain that in-turn causes physically pain. This phenomenon may occur when someone dies or some news so foundation-altering occurs that the Intellect flat-out refuses to accept it. There is an interesting anthropological mapping of this concept in the work of anthropologist Renato (1941) and Michelle "Shelly" Zimbalist Rosaldo (1944-1981) and their resulting work with headhunters from the Philippines and their supposed unique emotion called: Legut. I highly suggest the reader pause and go and listen to the NPR podcast *Invisibilia* two-part series from June 2017: *Emotions and Emotions Part 2 (High Voltage)*. (NPR 'Legut' Report.)

Our Physical Body has muscle memory, our Endocrine System discussion will unpack the emotional memory, and the Intellect is filing away the actual memories made internally for everything else. What is absorbed isn't ever forgotten though it may be

buried by other newer points of data. Just like the idea that *you don't ever forget how to ride a bike*. The idea that children are just like sponges soaking in all the information around them is quite literal. While not everyone can recall numerous and vivid memories from their childhood, it is more from a lack of trying and practice than a lack of memories.

Certainly, if a child themselves realizes that memory is important and works to remember starting at that young age, then they will have it. Artist such as H.R. Giger (1940-2014) stated in interviews and documentaries that he was influenced in his paintings from memories he had of being in the womb. Anything may stick within our Human-System and it is the burden of the whole to figure out how to carry all of it.

Do you keep yourself from others in order to better screen yourself for potentially better ideas later or do you risk exposure, potentially picking up an idea you can't conceive? We don't live in a perfect world so of course, environmentally and realistically, it is a luxury to have a choice in how or what is learned. In our modern society it is simply left up to each Human-System to render for itself the meaning and value of those experiences and in real time. All the while never being able to conceive what certain groups of society are shaming them for not knowing or not doing.

The Id

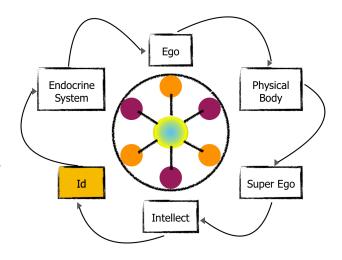
Answering: What do I want?

Once the coding of the Intellect has occurred, the Mental-Self can render an base internal checksum. This is simply a ranking of pressing needs of Human-System, to help draw focus so internal errors are fixed. This is the Id and its job is to relate to the rest of the system the next priority of that system. The Id is answering: What do I want?

The Id is the last of the three psychological objects, (Ego, Super-Ego, and <u>The Id.</u>) These three *Aspects* all share a single database which creates that part of ourselves that is responsible for our

Thinking-Self or a term used by another scientist, our **Awareness**. Current researcher Michael D. Fox with the Laboratory for Brain Networking, Imaging, and Modulation uses the terms **Awareness**, but also, there is a second active part which he calls **Arousal**. In my model, his terms describe the other half of the sphere, the Physical-Self. (How do you know you know? 2016)

As you can see from this model,

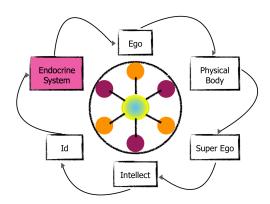


the Id sits across from the Physical Body and the *Inverse and Opposite* effects of these two *Aspects* act as yet another indicator for potential malfunctions. The Id is thoughtless, 'pure desire' which just so happens to sit cooperatively across from the Physical Body. This is like saying the Id has the keys to the car. We know our Human-System is very susceptible to chaotic thoughts which, in this instance, would render easily as *addiction*. The other *Aspects* working together make up a supporting program that aligns appetites with the balanced internal motivations.

The Endocrine System

Answering: How do I feel?

The Endocrine System is the last part of the Physical-Systems but more importantly, it's the part of the whole Human-System that feeds chemical-signals to the rest of your body. On the Geometric Primer, it is the *Aspect* where all the thicker colored-bands representing the forces originate from. The Endocrine System is in charge of answering the question: How do I feel?



Feelings are easily misunderstood because it isn't just one chemical and one concept - nor do

they represent a truth that is apart of the shared external reality. *Feelings* in general are individual constructs that are created to communicate or project singular internalizations. Humans invest a lot of time and energy dealing with these feelings or a lack thereof from themselves or others. *Feelings* get messy but they become easier when you know where they come from.

The Endocrine System includes other embedded systems including a <u>Digestive System</u> with its embedded <u>Enteric Nervous System</u>. Both of these subsystems play crucial roles in maintaining the proper equilibrium for both the body and the mind. Our physical bodies need the proper nutrients for regular function, and if it doesn't get it, it cannot produce the precursor chemicals that the Intellect needs for higher level functioning. It is the liver the produces progesterone which the brain uses to make oxytocin. By abusing, toxifying, or withholding from the Physical-Self proper and essential nutrients and calories, the higher-functions are never reached. The difference is like running in sand versus running on cement - way more work is needed to overcompensate for the lack of firmness underneath one's feet. Nutrition isn't a subject that has wide spread acceptance consensus but this is mainly due to further information infections. Cures for these infections will be discussed in further sections.

Neuroscientist, <u>Lisa Feldman Barrett</u> (Northeastern University), reported in her work "The Theory of Constructed Emotions" details the sensations the inner self can

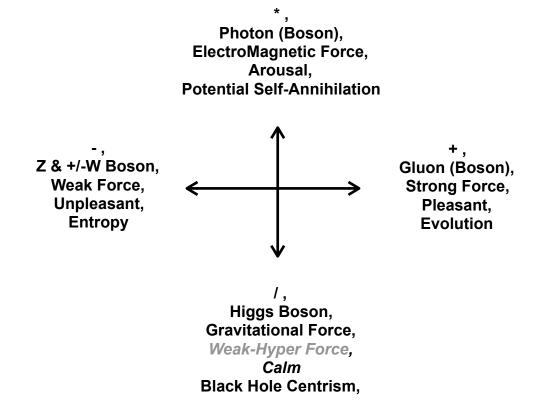
express about it's internal condition. Good news, there is a TED Talk. (TED Talk Link). They are:

Pleasant Unpleasant Arousal Calm (Journal Link)

Barrett more recently explained in her book published March 2017: How Emotions are Made: The Secret Life of the Brain. (Houghton Mifflin Harcourt. ISBN 9780544133310):

"In every waking moment, your brain uses past experience, organized as concepts, to guide your actions and give your sensations meaning. When the concepts involved are emotion concepts, your brain constructs instances of emotion."

It isn't a coincidence in science that are the four *flavors* running through the pipes of the Endocrine System: pleasant, unpleasant, arousal, and calm. These are what is sent to each *Aspect* (Ego, Physical Body, Super-Ego, Intellect, and Id) for diagnostic communication efforts. There is another interesting characteristic of these four chemicals, they also appear to be a set of *Inverse* and *Opposites*. Pleasant and unpleasant are opposite to each other, with their inverses being arousal and calm. **Pleasant** is "*right*;" **Unpleasant** is '*left*;" **Arousal** is '*up*;" **Calm** is "*down*." This is why they are placed on the **Modern Minor Key** as they are:



The Endocrine System is the last of the equatorial *Aspects* and how all these *Aspects* work together is yet another featured. These Aspects are governed by manifestations of TIME and this special program will be explained next. This section will be followed by its *Inverse* and *Opposite* and last Aspect, the Central Core. The ending result will be new insight into what lays behind human consciousness.

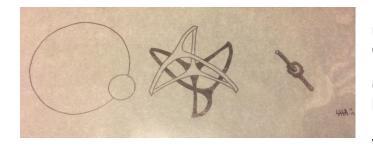
The Programmer

Time to Ourself

With issues like addiction and malfunctions like the 'Dunning Kruger Effect,' operating a Human-System might seem overwhelming but there is characteristic that helps maintain a healthier Human-System Mindset. **Absolutely Time** exists on the parameter of the equator of the Geometric Primer and there are a couple of manifestations of this characteristic. This paper briefly discussed one, memory. There is also another.

Our Human-Systems have a point of consciousness that circumvents the equator of the sphere, moving around to the various *Aspects* in order to get their weigh-in. It is by moving this 'outer point of consciousness,' which this paper calls the **Programmer**, along the parameter line of our understanding that we are able to get the balance of input needed. How does that work?

A dietary example: Yes, you might want potato chips but in four seconds you are going to remember you are on a diet. You take three seconds worth of steps towards the kitchen when by second four, your *Spin* kicks in. The Intellect reminds you of the goal you set so you go and sit back down. It's all about internal peer review and remembering why you are suffering. This is a critical science of the Self. That is, until you get back to where you were sitting and forget about your diet and start wanting chips again. Eventually, you'll address your Physical Body's need for a snack or resolve against your Id for wanting something it can't have.



The picture to the right represents the different layers to our consciousness, separating out the Programmer (far left image) from the Central Core (far right image). Since a brain is solid, the Spinning of the Programmer is manifested in three ways:

- 1.) Moving Forward: internally-processing current events
- 2.) Remaining Still: considering possibilities or weighing options

3.) Moving Backwards along the line of causality: remembering or recalling past events.

The Programmer, therefore, is what allows us to apply *the concept of time* from the Geometric Primer to the Human-System. As a collected set, these *Aspects* working together to represent one half of the human consciousness. What is the other half? It is its very own *Inverse* and *Opposite* singular Central Core.

The Central Core

Answering: Are you true to yourself?

The Central Core is unlike all the other *Aspects* discussed. The previous six Aspects are complimentary sets of *Inverse* and *Opposite* controlled by a Programmer. The Central Core is *Inverse* and *Opposite* to that whole system and acts more like a reflex. The equatorial *Aspects* work by running what is called 'a query,' either by asking its question or giving an answer, using their adjoining database. 'A query' to a database is a *dynamic* request for information from that database, meaning the *query* could be a *smell* with the answer being a memory of *the last time you can recall smelling something similar*. The Central Core is different as it passively knows every data point already and has a simple binary protocol set over the system to protect everything that has been entrusted to it: "Are you being true to what you have put inside me? Yes or no." That is all that the Central Core is concerned with.

Additional supporting work by Michael D. Fox also shows that both the *Arousal* and *Awareness* activity cross over in a brief spot in the brainstem so there does exist a minuscule focal point as a manifestation this embedded Central Core. The research being done by the fellows at the Laboratory for Brain Network, Imaging, and Modulation include a discovery published in the April 2015 edition of the American Academy of Neurology: Human Brain Networking Linking Arousal to Awareness. It has been found that there is measurable 'center' to Human Beings so the idea that there is a Central Core is also not out of the question.

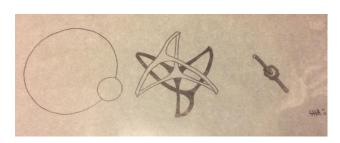
The Central Core is self-weighing protocol that creates an average vibration or vibe in regards to what is actually going on inside said Human-System. How true is it being to the data it has absorbed? The whole Human-System is not intrinsically aware of anything outside itself so it doesn't assume the Programmer is cataloguing anything it shouldn't be. This means there are not necessarily alarm bells going off in someones head if they gain bad habits and they don't immediately prove themselves. If systems don't know better, they just don't know

Why put bad data inside a system if that isn't sustainable? Therefore, a reasonable person would be one only wanting to put the best inside itself of themselves.

At our Central Core, all systems want to be be living the best most accurate truth there could be. The definition for insanity could be drawn from this stand point. Insanity is a state in which the actions taken by a Human-System hurt that Human-System. There are data points we inherit from our ancestors and others we inherit from society. For good or ill, we are infected with knowledge and it makes us all a little insane at times.

The Continuum of Consciousness

Going back to the three images shown below, the one on the right shows the

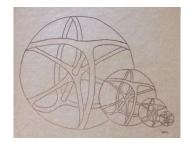


Central Core which is the average opinion systems have of themselves. These opinions are based on what has been done to whole system and what it is now left able to do. This is represented by the middle image showing the physical settings. These are the real-time abilities, potential disadvantages, or internal-processing

capabilities. On the left is the Programmer which directs which stage we are at in metabolizing reality. There it is. The Continuum of Consciousness broken out.

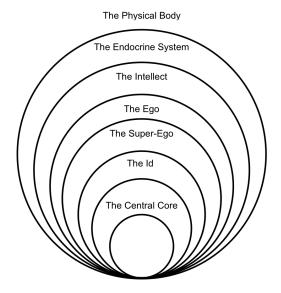
The Programmer was earlier described as a 'form of consciousness,' which was a flow between the networked system. This was also further described by Michael D. Fox as 'thought to reside somewhere in the cortex, the outer layer of the brain responsible for many of its higher functions.'

The image on the right shows how the Geometric Primer can lie fractally along itself, like Russian Nesting Dolls. This is the Master/Slave manifestation. These can go on infinitely and in either direction but for normal Complex-Systems, there are just seven layers. Previously, the Geometric Primer has been showing how it is behaving according to a cooperative set of rules. But how does the Human-System obey the physical rules. This is how:



What you get is what is pictured below:

What you are looking at is how the Human-System is physically put together. The Physical Body has an Endocrine System. Embedded in that system is a brain with an Intellect. Within the Intellect there is an Ego. Part of that Ego can reason and we call that part the Super-Ego or reasoning center. And within that very reasonable center is something very unreasonable, the Id. And lastly, the unreasonable and simple of all, the Central Core. When looking at this Nested Series, you might be able to see the obstacle in trying to get to the Central Core from outside the Physical Body. Each level is a universe unto itself and must be in true alignment for the *True Self of a Person* to be rendering.



There is still more to learn and we have just scratched the surface. With this basic (albeit heavy) understanding of the Geometric Primer, we are able to take what we have learned and start gathering in ideas relating to best practices and treatment of Human-Systems. In the fields of Math and Physics, the questions that needed answers came in the form of orientation of particles and from tracking phenomenon that has been repeated in a laboratory. There was also the concern for a proper boot sequence to the universe which put all these ideas together. The Human-System rendering of these topics will be unpacked under the section on Best Practices Involving Human-Systems.

There are more ways to anchor this Human-System with the rules of other dimensions including the mathematics in the Master/Slave model. These rules give a mathematically measurement to Human-Systems with new insight into the behavior of numbers.

A Mathematical Measurement of the Human-System

A Geometric Primer and any model from it does imply that there is something to measure. As it turns out, when you align what it means *to-be-human* with the workings of a *sphere-that-Spins*, the math for making measurements is visible and translatable. Of course, this refers to the formula for measuring the <u>Rotational Kinetic Energy of a Sphere.</u>

This model suggests that if you simply add up all the parts of our Human-System. First is the original state of the sphere. For our Human-System, this is what people are born with. Second is the sum of the increasing *Spin*. This is what goes into each system and what the Programmer and Central Core achieve with their lifetime. Lastly is what has become of that system when the *Spinning* is stopped, either to take a measurement or due to death. All of this equals the sum of all that is *Inverse* and *Opposite* about a Human-System during a time of shared reality.

Rotational Kinetic Energy of a Sphere

Here are everyday colloquiums used over the explanations from Physics for Dummies. Integration edits were added using bolded text in [] after the explanation are given from:

"To go from the linear version [how a person grows up] to the rotational version [how a person IS growing], you have to go from mass, m, [total amassed experience] to moment of Inertia, I, [what you have going for you,] and from linear velocity [the growth-process] to angular velocity, w, [the active processing condition of the internal world as it metabolizes data - or Phaneron, for short.] {You see this physically when someone is thinking and they tilt their head.}

"You can tie an object's tangential speed, v, [ability to process data,] to its angular speed, w, [Phaneron] like this:"

$$v = r w$$

"where r is the radius [internal signal distance to central core] and w is its angular speed [Phaneron.]"

"the kinetic [statutory.human-energy] equation gives you the following:"

"S.HE" =
$$\frac{1}{2}mv^2 = \frac{1}{2}m(r^2\omega^2)$$

"The equation looks okay so far, but it holds true only for the one single bit [personal experience] of mass [net amassed experience] under discussion [scrutiny] — each other bit of mass [other personal experience] may have a different radius [internal signal distance to central core], so you're not finished. You have to sum up the kinetic energy [statutory.human-energy] of every bit of mass [anything ever metabolized over it's life time] like this:"

"S.HE"
$$=\frac{1}{2}\sum(mr^2\omega^2)$$

"You can simplify this equation. Start by noticing that even though each bit of mass [peoples' amassed experience's] may be different and be at a different radius [internal signal distance to central core], each bit has the same angular speed 'programming model to process data from the same reality' (they all turn through the same angle in the same time.) (We all process data the same way.)"

"Therefore, you can take the *w*, [your personal phaneron] out of the summation:"

"S.HE"
$$=\frac{1}{2}\Sigma(mr^2)\omega^2$$

"This makes the equation much simpler, because:"

$$\Sigma (mr^2)$$

"equals the moment of inertia, *I*, [the sum of 'what you have going for you.]"

"Making this substitution takes all the dependencies on the individual radius [removes the human aspects no one has control over i.e. physical limitations and environment factors] of each bit of mass out of the equation, giving you"

"S.HE" =
$$\frac{1}{2}l\omega^2$$

"Now you have a simplified equation for rotational kinetic energy [Statutory Human Energy.] The equation proves useful because rotational kinetic energy [which is now just another way of saying Human Potential] is everywhere." # End of Edit #

Having a system that is capable of being measured also implies that issues with that systems should also be definable. This opens the door for defining programming malfunctions of Human-Systems. That topic better explains the origins of mental health issues and will be unpacked in the next section on programming malfunctions.

Human-System Programming Malfunctions

When the Human-System metabolizes an incorrect truth or it stops accepting new truth, the simple questioning-aspects of our model must work through an additional "lens" added to the query which skews or warps it. Below are the original questions from earlier listed here as a reminder with the appropriate lensing-modifiers. To the left are the "Untruther" lens, and on the right, what is being called the "Antitruther" lens.

Paradoxical Lensing of the Self-Questioning Model

"Untruther" "Anti-truther"

The Ego answers: What is real **BUT** lensed with...

How will I ever know? <-- * v *--> HOW AM I WRONG?

The Physical Body answers: How do I behave **BUT** lensed with... Why should **I** do anything? <~~* v *~~> WHY DO I HAVE TO DO IT?

The Super Ego answers: What does this mean **BUT** lensed with... **Isn't everything my responsibility?** <~~* v *~~> HOW IS THIS MY RESPONSIBILITY?

The Intellect answers: What do I believe BUT lensed with...

Am I not just really garbage? <~~* v *~~> AM | NOT SUPPOSED TO BE SPECIAL?

The Id answers: What do I want BUT lensed with...

Am I worth the effort? <~~* v *~~> AM I NOT (NTITL(D TO IT?

The Endocrine System answers: How do I feel **BUT** lensed with... **Am I not disconnected?** <~~* v *~~> I\$N'T LIFE \$UPPOSED TO BE THIS OVERWHELMING?

The Central Core answers: Are we true to ourselves **BUT** lensed with...

I am always wrong! <~~* v *~~> 1 \(\text{\text{M}} \) \(\text{BY MYSELF!} \)

Due to the innocent susceptibility of our Human-System Model to *malfunctions* when given inadequate environmental standards, it is easy to render that this sensitivity means our Human-Systems should have more intentional care given to it at every stage of its development. Further more, it should be done with care and consideration to the potential overall, long-term sustainability of the Human-System involved. Many of these ongoing malfunctions increase avoidance behavior in themselves and other's and this seclusion from a community, whether voluntary or not, increases the potential for waste.

This is one of many ways Human-Systems are similar to Computer-Systems. Briefly discussed in PART ONE was the manifestation of the Boot Sequence used by computers as well as the Master/Slave nesting style seen in Computer's OSI modeling. Human-Systems built Computer-Systems but nothing escapes this Geometric Primer. Because of the Geometric Primer, these other renderings made by Human-Systems may finally have something unbiased to be compared to. Most of these man-made concepts are will be unpacked in PART THREE.

Computers, though, are built on a logic-sequence directly connected to physically systems which is further encased in something, like a box. It may not be the nicest comparison but Computer-Systems and Human-Systems are parallel manifestations of the Geometric. The next section explains how.

Human-Systems and Computing-Systems

For many lay people computers are just magic. Computer illiterate consumers, who have the funds, may easily purchase mechanical devices designed as <u>plug and play</u>. Plug and play refers to the ability of a potential user to start using a device without having to know anything about it first. This means a consumer just needs to plug it in and it plays without needing a setup protocol. The disadvantage being for the curious user, there being little to no way to figure out why something is happening or how to hack it.

The history of computers reaches farther back into time then one might think. It starts with the purist science behind computers: mathematics. The roots go all the way back to Sir Isaac Newton (1642-1726/7) who gets most of the fame for the creation of Calculus, though, Gottfried Wilhelm Leibniz (1646-1716) did have much to contribute. Newton wrote out proofs in a traditional way, with lots of complicated terms being very, very heavy to follow. It was who Leibniz introduced the shorthand notation that students current use and even the word, Calculus. Following Newtons logic but using Leibniz's shorthand is what made the math become even more accessible. The strict discipline of mathematics was made more flexible. Mathematicians could pull the words out of a book and make them do things. The philosophy though, in regards to computers, was still more in line with basic calculating machines.

<u>Youtube Video</u>: The Opposite of Infinity by Numberphile. (September 8, 2015)

<u>Infinitesimals</u>

Before Newton and Leibiz, it was only a small section of society that had control over the educational advancement of most of the known world. The field of Mathematics had to undergo a separation from Religious Institutions which held many of the underlying ideas of Calculus to be based on false religious doctrine. An excellent rehashing of this story is the book written by <u>Amir Alexander</u> on this very subject called

Infinitesimals. Evidence was uncovered in this century that early Italian post-renaissance scholarly 'Generals' suppressed work relating directly to Calculus 100 years before Newton and Leibniz were even born. Calculus, which explains objects in motion, led the way for the Industrial Revolution and modern society as we know it. If this discovery had occurred 100 years earlier in Italy versus later in Europe, the world might currently have had a population living in spaceships speaking not mostly English but Italian. Just as a bit of perspective.

Even the word <u>Computer</u> comes from computing, which is something done with numbers. Not much changed in the thinking of math and computers until <u>Augusta Ada King (Byron)</u> (1815-1852), also becoming the Countess Lovelace and the only legitimate daughter of <u>Lord George Byron</u> (1788-1824). She was trained in mathematics, science, and logic which was unusual for a woman at the time. This was recorded to have been done in order to subvert a potential inherited disposition from said father. Countess Lovelace she was the first to believe that computers could go beyond pure calculations and even worked with <u>Charles Babbage</u> (1791-1871), the 'father of computers' and his <u>Analytical Engine</u>. In 1843, she published **Notes** regarding an article written by <u>Luigi Federico Menabrea</u> (1809-1896) in Italian about Babbage's new engine which included her method for calculating <u>Bernoulli numbers</u> on said engine. For this, some give her credit as the first programmer.

Pattern/Program

Modern-day mathematician, founder, and CEO of Wolfram Research, Stephen Wolfram further extrapolate's this idea in his book A New Kind of Science (2002):

"For all it takes is that systems in nature operate like typical programs and then it follows that their behavior will often be complex."

Wolfram goes on to discuss in his book how simple programs or patterns result in complex and even fractal dimensions. The Geometric Primer was shown to be a pattern/program in PART ONE, which in PART TWO was aligned with the Human-System and Aspects aligned in a pattern, running programs. What exactly are those programs? This paper referred to them as Queries but their programs may be define further:

The Ego answers: What is real? ~> [Mental-Self Query: Match Patterns]

The Physical Body answers: How do I behave? ~> [Physical-Self Query: Gather Data]

The Super Ego answers: What does this mean?
~> [Mental-Self Query: Review Patterns]

The Intellect answers: What do I believe?

~> [Physical-Self Query: Code Data]

The Id answers: What do I want? ~> [Mental-Self Query: Create Patterns]

The Endocrine System answers: How do I feel?
~> [Physical-Self Query: Review Data]

The Programmer manages the responses over time. ~> [Continuum Program: Creating and updating datasets.]

The Central Core verifies: Are we true to ourselves? Yes or no. ~> [Binary-Checksum: Do patterns match previous datasets?]

To help separate out the Physical and Mental queries, they are color coded blue and red, respectfully. The Physical and Mental-Self are both controlled by the Programmer who is a blue-red continuum program, so it is purple. The Programmers *Inverse* and *Opposite*, the Central Core, is colored purple to match.

These *Aspects* may be reduced down to attributes that people are more familiar with. Here are the same programs listed above but explained more simply:

The <u>Believing</u> attribute is a **red program** performed by the **EGO**.

The <u>Behaving</u> attribute is a **blue program** performed by the **Physical BODY**.

The Reviewing attribute is a **red program** performed by the **SUPER-EGO**.

The Resolving attribute is a **blue program** performed by the **INTELLECT**.

The Wanting attribute is a **red program** performed by the **ID**.

The <u>Feeling</u> attribute is a **blue program** performed by the **ENDOCRINE SYSTEM**.

The <u>Sense of Time</u> attribute is a *purple program* performed by the **PROGRAMMER**.

The <u>Sense of Self</u> or <u>Sense of Personal Space</u> attribute is a *purple program* performed by the **CENTRAL CORE**.

There are still more similarities between Human-Systems and Computer-Systems and the flashbacks through history are not yet complete. Another stop that gives greater insight into this connection are the theories that have survived ridicule enough to now stand as testaments to their prophetic insight.

Turing Completeness with Human Neatness

The resemblance of computers to human brains has long been correlated. It is to be the crowning achievement in the field of computer science's <u>artificial intelligence</u>, being able to replicate what it means to be human with nothing more than a series of algorithms. Whichever computing systems lays claims to this ability, must be said to have passed a <u>Turing Test</u>, set forth by the brilliant mind of <u>Alan Turing</u> (1912-1954). This concept has been highly explored in pop culture and films including the 2015 release of the psychological thriller <u>Ex Machina</u>, written and directed by <u>Alex Garland</u>. In the movie, a programmer is brought in to run a <u>Turing Test</u> for a computer artificial intelligence that was built in secret and kept imprisoned.

Alan Turing also devised the rules for defining computational universality for *Turing Machines*, a precursor modeling to modern computers giving us standards known as *Turing Completeness*. To be Turing Complete, the designer must show that a system simulates a complete Turing Machine. Turing Machines are systems with data-manipulation rules, which can be anything, but they would all be structured logically with the same parts that were defined by Alan Turing himself. Does the Geometric Primer have Turing's parts: an Infinite Memory Tape, Read/Write Function, and controlling mechanism/rules?

The Human Memory Tape

In the May 2010 edition of Scientific American, Paul Reber (Northwestern University), wrote in an article entitled What is the Memory Capacity of the Human Brain, that the human brain could hold upwards of 2.5 petabytes of data. This is 300 years worth of constant visuals that could be stored in brain tissue. One of the needs for a computer to measure up to a Turing Completeness standard is access to an 'Infinite Memory Tape.' In actual practice, infinite can simply describe an amount of tape that could store all the potential memories of a single lifetime. For our Human-System model, allowing even for a longer than normal lifespan of constant awareness, would still only reserve half of its available tape - or memory space. So, the Human-System has a memory tape. The Universe-System opens into an Empty-Dimension and is able to expand infinitely. That manifestation also fits.

The Human Read/Write Function

Does our Human-System contain a read/write function? Already built into and described in Human-System is the Programmer which is in charge of internally-processing data over time. The Universe-System has TIME itself, giving insight into the read/write function itself. Being able to read/write in a computer is the manifestation of the Master/Slave modeling in Computer-Systems.

The Human Controlling Mechanisms

What controlling mechanism exist in Human-Systems? The embedded nature of this model allows for this to be answered on every level. Every level has controls specific to the **SPACE** as applied over **TIME**. For example, the Endocrine System is piping chemicals to each *Aspect* which is also constantly querying their database ready at a moments notice in case they are asked to do their job. In the Universe-System, there are very strict rules for how matter and energy interact that are given by the system itself.

The Human-Systems is Turning Complete

This Geometric Primer would meet the standards, at least in appearance of logic, to being Turing Complete. As the *Aspects* of the Human-System are able to both ask questions and receive updates, this trait allows us to now compare our Human-System with another theoretical computer construct: a Turing Oracle.

Turing Oracle

An Oracle machine has two states, an *asking* state and a *response* state which is manifestation of how the six *Aspects* operate with each other through their *Inverse* and *Opposite* relationships. In an Oracle Machine, the contents of the tape are viewed in an instant, the oracle is then consulted to replace the contents of the tape with that new instance of the problem, the tape head being allowed to move on. Roughly speaking, a Turing Oracle seems nothing more than what this has already described as an active Human-System. It's the point in which artificial intelligence is supposed to become general awareness. Pop-Culture has also made strides in this concept so it might be clearer to some to say that Human-Systems are, yes, a form of Human-Cylon.

The Geometric Primer Stacked-Up Against the OSI Model

Introduced in PART ONE is the manifestation of the Master/Slave nested model of the Human-System. Even in this format, the logic and comparison for the Geometric Primer can be said to hold *Network Logic*. Indeed, the Human-System starts to look like a manifestation of the expanded TCP/IP network model: the updated Standard OSI Model. The TCP/IP and updated OSI Model are used as general network architecture for communication across devices. The OSI model is a standardization of computer functions that explains the dynamic interoperability of communications between internal layers by a simple set of standard protocols. More simply, it explains how a mouse click brings on a new webpage, occurring on a timescale so small people are barely able to perceive it.

Here is a chart of the OSI Layers, their descriptions being contained in the last three columns. First, start by reading the Human-System *Aspect* that each Layer is being compared to and remember what you read earlier. Try to render the meaning of the Layer through your understanding of the *Aspect*. If this seems too heavy, this chart

will be further broken down into something more relatable. Read it as best you can and it will eventually the meaning will become clear.

Standing the TCP/OSI Model on its Head			
compare to: The Physical Body	APPLICATION LAYER	OSI Layer 7	Serves as the window for users and application process to access the network services.
compare to: The Endocrine-System	PRESENTATION LAYER	OSI Layer 6	Formats the data to be presented to the Application Layer. It can be viewed as the 'translator" for the network.
compare to: The Intellect/Brain	SESSION LAYER	OSI Layer 5	Allows session establishment between processes running on different stations.
compare to: The Ego	TRANSPORT LAYER	OSI Layer 4	Ensures that messages are delivered error-free, in sequence, and with no losses or duplications.
compare to: The Super-Ego	NETWORK LAYER	OSI Layer 3	Controls the operations of the subnet, deciding which physical path the data takes.
compare to:	DATA LINK LAYER	OSI Layer 2	Provides error-free transfer of data frames from one node to another over the physical layer.
compare to: The Central Core	PHYSICAL LAYER	OSI Layer 1	Concerned with the transmission and reception of an unstructured raw bit stream over the physical medium.

The descriptions used for the Layers are general and not invented by the authors. These descriptions are listed on several infographics by online testing sites used to study for networking exams for certificates - and this Layering stacks quite well.

The rest of this section will contain further details extrapolating the above table. It can't be assumed to be obvious how all of these words above translate easily across dimensions. Here are the same descriptions followed by a Human-System translation:

Layer 7 - Application

The Application Layer:

Serves as the **window** for **users** and **application process** to access the network **services**.

Compared to our Human Model/The Physical Body:

Serves as the *vehicle*, for the **Central Core** and the *Programmer* to access the network *Reality*.

Laver 6 - Presentation

The Presentation Layer:

Formats *the data* to be presented to *the Application Layer*. It can be viewed as the '*translator*' for the *network*.

Compared to our Human Model/The Endocrine System:

Formats *chemical responses* to be presented to the *Whole Body*. It can be viewed as the '*general acceptance*' for the *person*.

Layer 5 - Session

The Session Layer:

Allows **session establishment** between **processes running** on different **stations**.

Compared to our Human Model/The Intellect/Brain:

Allows **psychological awareness** between the **Aspects internally-processing** on different **perspectives**.

Layer 4 - Transport

The Transport Layer:

Ensures that **messages** are delivered **error**-free, in **sequence**, and with no losses or duplications.

Compared to our Human Model/The Ego:

Ensures that **opinions** are delivered **judgement**-free, in **due-time**, and with no losses or duplications.

<u>Layer 3 - Network</u>

The Network Layer:

Controls the operations of the **subnet**, deciding which physical **path** the data **takes**.

Compared to our Human Model/The Super-Ego:

Controls the operations of the *Reasoning Center*, deciding which physical *neurons* the data *needs to align with.*

Layer 2 - Data Link

The Data Link Layer:

Provides error-free transfer of *data frames* from one *node* to another over the physical *layer*.

Compared to our Human Model/The ID:

Provides error-free transfer of **desires** from one **Aspect** to another, over the physical **Intellect**.

Layer 1 - Physical

The Physical Layer:

Concerned with the *transmission* and *reception* of an *unstructured* raw *bit stream over* the physical *medium*.

Compared to our Human Model/The Central Core:

Concerned with the *truthfulness* and *metabolization* of an *uncontrolled* raw *personal experience acquired during* the physical *day*.

Human Paradoxes Compared to Computer Paradoxes

The Human-System that has been described details the cyclical relationship between the *Inverse* and *Opposite* Aspects while taking in new data over time. Not everyone experiences the same chemicals and thoughts at the exact same time, in the same strength and degree of influence, or in the same environment. But we all do or would experience the same thing if we had the exact same beginning criteria making human needs easier to predict.

Hillel the Elder (born 110 BCE) is known to some as being the origin for the exceptionally profound and yet simple wisdom: "That which is hateful to you, do not do to your fellows." It's a little bit more specific than the current adage of "do unto others as you would have them do unto you." Both of which are trying to express the same higher bit of advice: if it hurts you, it is going to hurt someone else.

Spectrum of Paradoxes

A Human-System doesn't stop *Spinning* until the system itself has become depleted or exhausted of energy. A human life will continue to strive to function despite having an unbalanced *Spin*, having metabolized bad information, or isn't properly supported by good data. One might say that our Human-System are susceptible to the manifestations of paradoxes, just like computers, logic, and the Universe-System. A paradox is an unnerving event in science but incidentally, when you arrange some of these paradoxes *Inverse* and *Opposite* to each other, you get striking similarities. Paradoxes simply exist as endpoints on a spectrum

What might be a Human-Paradox? This isn't a topic to take lightly, but I am indeed referring to mental disorders, or manifested malfunctions of a Human-System which is in distress or in an unbalanced state. Our Human-System, because of it's *Inverse* and *Opposite* quality, can get stuck in **CAUSAL** feedback **LOOPS** or even refuse to internally-process certain data becoming **HALTED**.

Imagine playing the board game <u>Chutes and Ladders</u>® but the deck is stacked with only *slide* cards or you sit across from an opposing player who just refuses to take a turn stopping the game. The purpose of the Human-System is to continuously consume more data points, to move forward as a part of a growing cycle in order to maximize the capabilities of the system: to play the game. A paradox stops this and renders the purpose moot. Instead of playing happily together, everyone just sits staring awkwardly across the game from each other. When this happens, all rules for conduct and decorum may go out the window. We do need each other but we need to be able to predict behavior if everyone is to be at the same level of comfort.

Modern medical standards for diagnostic understanding are derived from The Diagnostic and Statistical Manual of Mental Disorders published by The American Psychiatric Association. They are currently on volume five and for short, some call it the DM-V. For the sake of Government Disability and general community acceptance of disabilities, actually getting an official diagnosis will be an ordeal. Many clinics working with insurances can't afford *clinical diagnostic services* and rely upon 'working diagnosis' or experimenting with therapies until some level of relief or maintenance is achieved. This means that for most patients there is only trial and error with no relief in sight.

It will seem reductive at first but it must be remembered that the descriptions listed here exist along a spectrum with an infinite number of possible manifested malfunctions. The goal is to bring each individual in alignment with the same universe of information, facts, and supports. Most progress made in self-improvement is through the personal internal journey and education which helps bring people into this universal alignment.

Human Paradoxes / Human Malfunctions

1.) IF The Human-System metabolizes a data point that is not a real 'fact' or 'truth,' then that system may experience a *disconnection* from society as their behaviors don't result in positive feedback. The Human-System is kicked into a downward spiraling state called *depression*; a mental and physical pain that is profound and debilitating enough that the concept of self-damaging is eventually permitted as a means of escaping the torture.

Metabolizes Untruth ~> Disconnection ~> Depression ~> Self-Damaging

2.) IF The Human-System beings to reject or dismiss truth then that system may experience a *narcissistic* viewpoint, being reliant solely upon already carefully internally-processed naive truth which lenses any and all feedback, positive or negative. This is done around an already egocentric dogmatism that the said Human-System's immediate and internal experience is the most real reality there is. This ideology may place a person so out of touch with reality that their personal-reality feels threatened and allows for a higher degree of self-preservation. Self-protection is allowed, at any cost.

Denies Truth ~> Narcissism ~> Egocentrism ~> Self-Preserving **Restarting Computers**

The concept of *Human Paradoxes* is new and in order to best review such a concept, let's compare the above set to their manifested set of problems in the field of computer science. A thought-experiment about paradoxes in field of computers known as The Halting Problem is a good place to start. Introduced by Alan Turing, The Halting Problem was designed as proof to figure out if there was a logically way to design a program to ensure that it would not cause said computer to ever stop working. Most people are familiar with computer issues and the most common IT solution: being told to first turn off the machine and then turn it back on again. IT professionals are not being pedantic in this advice as most computer errors can't be solved by simply back-tracking. Systems get messed up and just need a restart.

Much of the writings by <u>Isaac Asimov</u> (1920-1992) play with this same theme, such as his book <u>I</u>, <u>Robot</u>, first published in 1950. It contains a series of short stories regarding the shenanigans of the first robots constructed by the fictional company US Robotics and Mechanical Men. Asimov's famous *Three Laws of Robotics* shows to be just an attempt to resolve the issues relating to The Halting Problem, and not always with the expected outcome. The inspiration for the term CAUSAL LOOP used often in this paper was inspired by the third story in <u>I</u>, <u>Robot</u>: *Runaround*.

Computer Paradoxes / the Halting Problem

1.) IF a computer accepts and processes illogic, which then violates the internal structured logic, the system will work to exist along a neutral point, an axiom of all possible causality, resulting in an infinite loop.

Processes Illogic ~> Axiom of All Possible Causality ~> Infinite CAUSAL LOOP

2.) IF a computer ignores logic, a general protection fault is dropped into place as an indication that the system is no longer taking new commands as the system has halted because commands are presented in logic.

Ignores Logic ~> General Protection fault ~> HALTED

As the reader can see for themselves, this universe allows for, evolves, and is even capable of using and maintaining paradoxes. This might seem terrifying but to quell our fear of these nightmarish producing phenomenon they are needed for the whole pattern/program to exist. Doesn't make them any less dangerous or scary. This is why movies like Interstellar name their Black holes such impressive names like Garganuta.

Human-System Overhaul and the Purpose of Paradoxes.

Paradoxes are just extremes, overuses or abuses, of any system. Corrections are made by interjecting new positive-based correcting-statements that reset HALTED points and reframe infinite CAUSAL LOOP statements. Biases, just like all habits, develop over time and cause us to get stuck. If this happens, the personal evolution of a Human-System is stalled.

Each Aspect of Human-System has created biases and like the advice outlined in the famous addiction anonymous program Alcoholic's Anonymous, by performing upon oneself an authentic 'moral inventory' of one's ideas or biases, does a person uncover their true self:

"Make a searching and fearless moral inventory of ourselves."

By practicing with the Intellect, with a conscious effort, the below infinite CAUSAL LOOP Lens-Correcting Statement, a Human-Systems should be able to access a transitionary state that allows each *Aspect* to be aligned for self-awareness, mastery, and control. This is so it may more wisely choose internally what should be HALTED or what needs to remain a consideration.

UPDATING ASPECT	Infinite CAUSAL Loop, Lens-Correcting Statement ~>	For the purpose of gaining	In order to be HALTED in this condition:
TO the Ego ~>	There is always a reason to be humble ~>	Moral / Personal Inventory ~>	More Aware.
TO the Physical Body ~>	There is need in acquiring self-mastery ~>	Discipline ~>	Balance.
TO the Super Ego ~>	There is admitting to deviances and errors ~>	Education / Exposure ~>	Repentant.
TO the Intellect	There is reevaluating previously accepted Truths ~>	Contemplation ~>	Emotional Exorcism.
TO the Id ~>	There is adapting self-control ~>	Time-Management ~>	Self-Fulfilled.

TO the Endocrine System ~>	There is accepting missed connections ~>	Moving on ~>	Reaching out.
TO the Programmer	There are benefits in working together ~>	Learning personal sacrifice ~>	Team Player.
TO The Central Core ~>	There is learning to accept rejection ~>	Gaining a Growth Mindset ~>	Living in Harmony.

The Needs accorded to our Human-Systems

There are various versions and levels of understandings in our currently popularized culture that have already been published or are currently being preached regarding what Human-System Needs are. This is sometimes done by trying to answer where they come from. There is a clue if you go wading through the pool of modern terms and as it turns out with a little rearranging, the vast majority of accepted concepts on these Needs begins to assemble into a solid foundation. From this foundation, the paper prepares a logic sequence into the proper care and maintenance of Human-Systems.

The Needs Group

To draft our understanding let's start with the three commonly accepted terms and one less accepted term that this paper will show is highly relevant and meets standards of rational acceptability. The three commonly accepted categories of Needs are: 1.) Physical; 2.) Emotional; and 3.) Intellectual. The less accepted need category is 4.) Spiritual, and since our model has a Central Core and Programmer which works as a *Consciousness*, this Needs category seems_appropriate as it gives a 'quality versus quantity' ranking for matters dealing with internal processing. In short, the Spiritual Needs can be thought of as things that feed a persons dual Sense of Self. Not so esoteric after all.

Physical Needs

The Physical Body as a whole is the first in our Human-System series with the other *Aspects* nestled inside it. It is easy to see the important in filling the Physical Needs are they are the most immediately encompassing. If something is lack in the Physical system, the rest of the system is going to suffer. Listed here are a few of the Physical Needs:

Water/Hydration

Nutritionally Appropriate Food

Temperature Regulation/Warmth-Coolness Proper Breathing/Respiratory Function Possible apparel or clothing Reproduction (when appropriate) Homeostasis

Emotional Needs

The Endocrine System is the next *Aspect* down in the series, making Emotional Needs the second most pressing. Where the Physical Body gets a taste for certain foods so too does the Physical Body get a taste for its internal chemical cocktail coming from the Endocrine System. The whole system prefers homeostasis or environments that change very little but this Endocrine System offers change constantly. Chemicals are released for various reasons, environments, and even because of internal-processing choices. So while Physical Needs are pretty standard, Emotional Needs are more dynamic and specific to the individual. Here is another list:

Belonging/Acceptance	Recognition	Control
Safety/Privacy	Appreciation	Comfort
Self-Expression	Affection	Respect
Validation	Attention/Admiration	Support
Acceptance	Appreciation	Wanted
Congruency	Approval/Recognition	
Trust	Capability	

Intellectual Needs

The Intellect is the whole brain and holds the psychological *Aspects* embedded within. The Intellectual or Mental Needs further reflect the psychological *Aspects* inside. All of the previously listed Physical and Emotional Needs must first have their requirements met before even the last Intellectual Need may be properly considered.

Knowledgeability	Attention	Pattern Matching
Understanding	Inspiration	Experimentation
Progress	Language	Questioning
Challenge/Intrigue	Observation	Confidence
Contest	Exploration	Forgiving
Determination	Manipulation	Trusting
Interest	Predict the future	
Amusement	Reflection	

Spiritual Needs

The Programmer, having all the other *Aspects* representing the other needs embedded with, is now ready to be paired with the Central Core. It is only during these small windows of peace, where the Physical Needs are guiet, the Emotional Needs are

met, the Intellectual Needs are inspired that the Central Core and Programmer can ponder out their own personal truth.

Self-Expression Self-Awareness Self-Actualization Self-Care Connection With Others
Sense of Self
Silence from Chaos
Personal Truth

The Memory Groups

The Needs Groups start to resemble another group-set, Memory Groups. As previous stated, current modern science knows only somewhat about *muscle memory*, *emotional memory*, and the *memory-memory*. It is easy to align those earlier terms used to describe the different types of Memory Groups to our Need Groups, renaming them to the more professional sounding *Physical Memory*, *Emotional Memory*, *Intellectual Memory*. *Spiritual Memory* is not a far fetched concept but it currently takes us outside the dimension of accepted science and will be reviewed much more in-depth in PART THREE.

Our **needs** are just those things that each *Aspect* requires in order to maintain proper balance with each Human-System fluctuating with where their focus *needs* to be. Abraham Maslow (1908-1970) defined physical needs as being those things that were critical for survival. As a species, we should all be concerned for our overall survival by ensuring basic needs are met as a right. This universal model, therefore, gives a scientific foundation for Universal Human Rights.

Rights Accorded the Human-Systems

"We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are life, liberty and the pursuit of happiness." -The Declaration of Independence, USA, 1776

This model has shown that it is 'self-evident' and that, indeed, a studious reader can now discuss with a stereographic-like projection how this fact is so. With this new clearly defined understanding comes rights, rules, and best practices. This paper has mentioned some of them briefly as it went along. In order to have life, in order to be free in liberty, and in order to pursue happiness, all Human-Systems must be empowered equally to make clear and distinct decisions in regards to their evolution.

Right to Truth

Any and all Human-Systems are susceptible to malfunction if placed in poor conditions but they also contain the tools for self-correction when placed in stable, supporting conditions. This paper states this emphatically because all of the Human-Systems start out completely empty of any knowledge but each is completely capable of reaching it's peak capacity if it has access to the most updated version of "truth." This is what the math and supporting evidence show.

'Truth' is that which most closely resembles our shared reality. Everyone needs access to the shared, external 'truth' when they are ready for it and should therefore have a right to it. Inversely, not having access to any **truth** should be recognized as an 'Injustice;' Oppositely, denying 'truth' or spreading false 'truth' could result in truth-decay, chaos, corruption, disconnection, and more. These are things that could be corrected by society through a system that is similar but less oppressive than the current legal-system. Participants would be judged based on the knowledge they had and ability to be self-disciplined. The only purpose of punishment from this system would be for rehabilitation which is now indefinable and treatable.

Rational Minds

A big difference in the political party system in the United States and much of the world comes from this disagreement about how people and this planet work, and therefore, how the world should be managed. Many people believe that it is only THEY who are smart enough to understand all the rational arguments and the reasons behind other peoples disagreement. Normally, 'the others' are perceived as being not smart enough to see the logic. It's the Dunning-Kruger Effect, but institutionalized and directed at constituents. The reality is, a rational argument is a thing that everyone, by definition, should be able to understand and agree on. The failure isn't therefore on the common people for obviously not knowing something they've never been told. Instead, the failure lies in the politicians who hold biases against the very people they are supposed to representing.

Here's another way of thinking about it. If you believe something that no one else does, logically, you have to carry on following the rules of the 99% majority until your idea gains merit outside of yourself. It needs to be based in rationality. To the rest of the world, you are "insane," regardless of the truthfulness of something and you have to at least acknowledge the limitations given to you by the encompassing majority. If you can't properly explain something, you are alone in your universe of knowledge until you do. It isn't a weakness in another person if they don't immediately understand you, it means you have a weakness, in that you don't understand enough of them.

UN Declaration of Human Rights

As with other fields, the Rights accorded the Human-System have been well researched and documented, if not accepted by certain governments. The United Nations General Assembly adopted the <u>UN Declaration of Human Rights</u> in 1948.

Despite its age, this document has no legal status in the American Court system (see Supreme Court case <u>Sosa vs. Alvarez-Machain</u>).

There are many people who believe the the US Constitution and Bill of Rights as documents with stronger claims to Rights made in them. That suggestion is now unsubstantiated in light of all the Human Rights that were left out. Some of these who believe in the US Constitution and Bill of Rights do so thinking that the founding fathers were truly inspired from a Higher Power. This belief should be analyzed through a different lens because obviously, the founding fathers left out a few key details. That is to be expected from such a narrow group who could only be aware of their own narrow set of needs.

Listed next are the Rights as listed by the UN. For the full declaration or links to printouts, visit the <u>UN's website</u>.

Article 1

All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.

Article 2

Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. Furthermore, no distinction shall be made on the basis of the political, jurisdictional or international status of the country or territory to which a person belongs, whether it be independent, trust, non-self-governing or under any other limitation of sovereignty.

Article 3

Everyone has the right to life, liberty and security of person.

Article 4

No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.

Article 5

No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment.

Article 6

Everyone has the right to recognition everywhere as a person before the law.

Article 7

All are equal before the law and are entitled without any discrimination to equal protection of the law. All are entitled to equal protection against any discrimination in violation of this Declaration and against any incitement to such discrimination.

Article 8

Everyone has the right to an effective remedy by the competent national tribunals for acts violating the fundamental rights granted him by the constitution or by law.

Article 9

No one shall be subjected to arbitrary arrest, detention or exile.

Article 10

Everyone is entitled in full equality to a fair and public hearing by an independent and impartial tribunal, in the determination of his rights and obligations and of any criminal charge against him.

Article 11

(1) Everyone charged with a penal offense has the right to be presumed innocent until proved guilty according to law in a public trial at which he has had

all the guarantees necessary for his defense.

(2) No one shall be held guilty of any penal offense on account of any act or omission which did not constitute a penal offense, under national or international law, at the time when it was committed. Nor shall a heavier penalty be imposed than the one that was applicable at the time the penal offense was committed.

Article 12

No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honor and reputation. Everyone has the right to the protection of the law against such interference or attacks.

Article 13

- (1) Everyone has the right to freedom of movement and residence within the borders of each state.
- (2) Everyone has the right to leave any country, including his own, and to return to his country.

Article 14

- (1) Everyone has the right to seek and to enjoy in other countries asylum from persecution.
- (2) This right may not be invoked in the case of prosecutions genuinely arising from non-political crimes or from acts contrary to the purposes and principles of the United Nations.

Article 15

- (1) Everyone has the right to a nationality.
- (2) No one shall be arbitrarily deprived of his nationality nor denied the right to change his nationality.

Article 16

- (1) Men and women of full age, without any limitation due to race, nationality or religion, have the right to marry and to found a family. They are entitled to equal rights as to marriage, during marriage and at its dissolution.
- (2) Marriage shall be entered into only with the free and full consent of the intending spouses.
- (3) The family is the natural and fundamental group unit of society and is entitled to protection by society and the State.

Article 17

- (1) Everyone has the right to own property alone as well as in association with others.
- (2) No one shall be arbitrarily deprived of his property.

Article 18

Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship and observance.

Article 19

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

Article 20

- (1) Everyone has the right to freedom of peaceful assembly and association.
- (2) No one may be compelled to belong to an association.

Article 21

- (1) Everyone has the right to take part in the government of his country, directly or through freely chosen representatives.
- (2) Everyone has the right of equal access to public service in his country.
- (3) The will of the people shall be the basis of the authority of government; this will shall be expressed in periodic and genuine elections which shall be by universal and equal suffrage and shall be held by secret vote or by equivalent free voting procedures.

Article 22

Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality.

Article 23

- (1) Everyone has the right to work, to free choice of employment, to just and favorable conditions of work and to protection against unemployment.
- (2) Everyone, without any discrimination, has the right to equal pay for equal work.
- (3) Everyone who works has the right to just and favorable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection.
- (4) Everyone has the right to form and to join trade unions for the protection of his interests.

Article 24

Everyone has the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with pay.

Article 25

(1) Everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the

event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.

(2) Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.

Article 26

- (1) Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.
- (2) Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.
- (3) Parents have a prior right to choose the kind of education that shall be given to their children.

Article 27

- (1) Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.
- (2) Everyone has the right to the protection of the moral and material

interests resulting from any scientific, literary or artistic production of which he is the author.

Article 28

Everyone is entitled to a social and international order in which the rights and freedoms set forth in this Declaration can be fully realized.

and the general welfare in a democratic society. (3) These rights and freedoms may in no case be exercised contrary to the purposes and principles of the United

freedoms, everyone shall be subject only to such limitations as are determined by

law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order

Article 29

- (1) Everyone has duties to the community in which alone the free and full development of his personality is possible.
- (2) In the exercise of his rights and

Article 30

Nations.

Nothing in this Declaration may be interpreted as implying for any State, group or person any right to engage in any activity or to perform any act aimed at the destruction of any of the rights and freedoms set forth herein.

These Rights have been established by best practices and none of these violate the Geometric Primer. Quite the opposite, these Rights outline and support the Human-System as it has been described as needing support. Currently, the United States is functioning without proper Rights for everyone so government acceptances of these Rights isn't enough. Laws, policies and other stop-gap measures would need to be implemented as the start to a transition process that aims at rehabilitating the whole nation together.

Best Practices Involving Human-Systems

Previously discussed was the general operation of the Human-System with some of the inherent benefits and pitfalls that develop from basic use. This means that there could indeed be at least an instruction manual full of best practices for raising Human-Systems. This includes a logic-based boot sequence that maximizes efficiency in the growth-process. There would also need to be a way to support the transition and rehabilitation of those not previously allowed this efficiency. That transition will need to be into a healthy, stable and supportive environment for which children and those who are rehabilitated are allowed to graduate. This section will review those best practices: Child-Rearing, Rehabilitation, and a Future Utopia.

Child-Rearing

Genetically, the idea that evolution is represented in the growth of the fetus isn't new. This concept is rendered down to <u>ontogeny recapitulates phylogeny</u>, a phrase coined by <u>Ernst Haeckel</u> (1834 - 1919.) Recapitulation theory was about trying to understand where the underlying similarities came from in fetal development. Much of the criticism surrounding this idea came as backlash because of its siding with concepts relating to evolution. Charles Darwin had previous introduced Natural Selection and by the 1980s it was accepted by science as real. It has been a heated subject for generations, something this paper's logic should finally put to rest. Human-Systems are indeed evolved and the attitudes and disposition in children are grown and may be cultivated.

A baby boot-sequence has not been obvious but many different rearing methods have been constantly developed with several of them later being debunked. A good example of this is the Ferber-Method. If scientific studies in these areas were made more inclusive and had results made more widely available, child-rearing could become a by-the-book training.

Importance of Family

An important first step in a baby boot sequence is the health and safety of the mother. The parents represent the zero-dimension in the boot sequence, it is their life that is pushed out of the way to make way for a child. A child must have the opportunity to be born to parents that are ready and willing to receive it. In our modern society, this brings up moral dilemmas around the termination of pregnancies. The religious fears coming from religions will get their own logic sequence explained in PART THREE. They will be addressed For now, thrust that the science indicates that for a child to succeed, it must be wanted.

This is hard in a world that has experienced a global rise in external child care institutions. Poverty forces parents lacking in adequate family-planning facilities to choose between which of their children to institutionalize. Studies have shown that even the best of these facilities fail at making the needed connections making the original family the best training ground. Tara Winkler TED Talk

In order for parents to have the time and space to care for children, they must be disciplined in meeting their own needs and able already to work together as a team. Creating environments that are conducive to supporting parents is therefore required for the success of the child. Parents should therefore be allowed to wait until they are mature, able to make sustainable decisions, and able to be patient in their suffering. Having children is not an easy given, it is work and requires personal sacrifice.

Once a child is brought into the world, rearing a child is done on a case by case basis though there are some best practices. Children learn more and grow faster than

anyone ever suspected. There have been many modern studies done to uncovering what babies are thinking and when they pick up new skills. Originally, it was thought to be nothing. Alison Gotnik TED Talk

The ideas that babies and children are not learning at this early stage has led to the mass information infection that exposure to such things as violence, pornography, substance, physical, sexual or emotional abuse was benign. Science has proven that the opposite case is true. This directly points towards the need for an environmental designed to be child friendly, clear of anything that distracts from growing, playing and learning which leads to the slow transition into more adult topics.

Time to Save Black Mothers

There is a maternal care emergency occurring due to the implicit racism that exists in the United States. CDC Statistics have shown the higher infant death rates between black and white woman have existed for over 100 years. It is currently worse than during slavery when Black woman were considered chattel. Mistreatment can be linked back towards implicit racism. As an immediate solution, a government sponsored paid-training program for Black Midwives and Black Obstetricians needs to be implemented. As well as racial training for current practitioners and additional options for education.

Human-Rehabilitation

Information infections are spread from one generation to the next and a main reason for their continuation is the need for the creation of an argument against them. How hard is it to argue against treating people equally? This is quite hard if people have been taught to believe they have the right to rule. If their entitlement is instilled from an even higher source other than themselves. In trying to transition individuals from one set of beliefs to another, their core ideas must be addressed for full acceptance and conversion to take place. A person in this positions may find themselves as an adversary to society as well as ill equipped with the tools to handle the change properly.

Then how do you update people who may not be able to immediately metabolize the message or the skills to do it gracefully? You have to give them a layered update and support them through each step of their transition. Much of the government of the United States and their policies are designed around ideologies on the treatment and regulation of people. Much of these reforms, for there to be true efficacy, need to happen on a government structural level. There was

Treating Racism

Einsteins Field Equation's were reviewed previously and in them it was mentioned that as each new level to the equation is built, a new balancing dynamic is added to the formula. Internally held truths and concepts are built the same way, gaining an added dynamical ability in their understanding which leads to higher level internal-processing. But are these towers-of-self based on solid evidence or are they destined to collapse? Human-Systems are blind to foreknowledge regarding which data points are going be valid longterm or not except through trial and error or shared experience.

These towers-of-self are the preset biases which are so strong and hard to dig out of people that concepts like 'Racism' can actually be seen as mass-spread information-infections. This *unsanity*, as Jacque Fresco might say, has many levels of recovery as Racism isn't just cleared away simply with one application of truth: we are all equal. Many people have it deep-seated that everyone is **not** equal. Personal entitlement over generations causes this infection to constantly morph and the degree of the fear to change. The racism of our forefathers changed to simply their daughters telling their kids to lock their doors as they came upon *Black* neighborhoods. And the role of black servitude continued to be portrayed in movies by characters such as <u>Stepin Fetchit</u>. For even the Black population was also being taught that it needed to despise itself.

Master/Slave Mentality

And where does this Personal Entitlement stem from? Simply a manifestation of the Master/Slave Model of the universe, or the realm of **Absolute Time**. Human-Systems are in tune with it. Of course, there are two manifestations happening with the Master/Slave model requiring less mental ability and more physical prowess. Master/Slave mentalities are about domination and controlling the emanation of truth. Their personal truth, though, above any others. While this method will work short-term, it is unsustainable long-term. Why? It isn't the stronger Truth and a more evolved method will always embedded the lesser.

Cooperative Mentality

This makes and shows how the Cooperative Model, a manifestation of the Quantum Realm, relies upon the achievement of a more evolved Mental-Self. It is sometimes painful to experience disagreeable ideas but if a Human-System is disciplined, it may be patient and properly manage its Physical-Self and its Mental-Self. Pain is more manageable when you understand the reason for it and cooperation becomes easier. The *Spin* characteristic of the model may be sped up or slowed down as needed, changing to meet the needs of the external world. The equilibrium achieved by the Quantum Realm is also made manifest by the Human-Systems adaptation of being well-balanced.

Balanced from what? Entropy is active in the Quantum Realm and in the cooperative model it is the surgical tool that allows the mind to deconstruct itself. Over used, this tool results in Human-Systems suffering from a *depression* in the data needed for internal-processing. This causes our self-aware systems to suffer from internal-processing disorders as the improper deconstruction-of-self only adds

confusion and chaos if what is lost isn't replaced with beneficial truth. Master/Slave mentalities stop processing truth, creating ever growing dark voids between themselves and those keeping up to date.

Historically, the excuse for horrific actions based on racist ideologies were rendered down by many text books as singular occurrences of Mass-Hysteria. These deeply rooted program-diseases may only be cured by the updating-techniques known in the mental health business as the cognitive reframe. This is a tool that the Mental-Self of our Human-System can use to do very powerful things like overcome trauma, or inversely, remove ourselves from blame. Reframing can be an exorcism or a possession. In order for the United States to deal with its systemic Racism Infection, the government needs to spend time and energy elevating the esteem of black community. This would be the only scientific way to start the recovery-process for all of us, because all of us are all infected.

Even in math there is a manifestation of mass hysteria. Numbers are susceptible to 'enablers' or the lack of exposure. Think of the concept that two negatives will always equal a positive. Why does that work? Until such a time as an opposing set of numbers is introduced to show an equation that there is a different perspective for calculating numbers, the numbers only know to do one thing. The functioning of the math isn't changing, just some red-tape of making sure the negative signs remain. Numbers don't know better. They are just doing their singular routine until they are updated with a binary subroutine.

Eye Movement Desensitization and Reprocessing (EMDR)

Is there good news to this concepts? Absolutely. There have been great strides made by modern therapies that allow Human-Systems to essentially hack themselves to a better Mental-State. As simplistic as it sounds, counselors, therapist, and psychiatrists have a new tool that makes this internal-process occur in weekly sessions, not decades. Many mental health practitioners focus on therapies whose goal is exactly this, including the classic Cognitive Behavior Therapy (CBT). CBT is a viable method but it takes years to see any kind of result. Eye Movement Desensitization and Reprocessing or (EMDR) treatment allows patients to communicate with the different levels of their unconsciousness and actively reframe powerful past events during a professionally guided self-dialogue. For patients with even severe automatic reactions, this direct access means that healing comes in a few sessions over months and not decades. For many, EMDR is seen as a possible cure for conditions from severe depression to Post Trauma Stress Disorder. A potential cure not just maintenance in ongoing treatment. EMDR is becoming more well known as this news report on the aftermath of mass shootings by Al Jazeera, explains. EMDR is named dropped as a treatment being used counter PTSD triggers 22:38 minutes into the interview. (Youtube Video)

Narcissism

<u>David Foster Wallace (1962-2008)</u>, in his 2005 Kenyon College Commencement Speech, entitled *This is Water*, Wallace explains another effect experience by the Human-System from the point of view of someone experiencing it:

"Here is just one example of the total wrongness of something I tend to be automatically sure of: everything in my own immediate experience supports my deep belief that I am the absolute center of the universe. The realist, most vivid and important person in existence. We rarely talk about this sort of natural, basic self-centeredness because it's so socially repulsive. But it's pretty much the same for all of us. It is our default setting, hard-wired into our boards at birth."

"As I'm sure you guys know by now, it is extremely difficult to stay alert and attentive, instead of getting hypnotized by the constant monologue inside your own head (may be happening right now). Twenty years after my own graduation, I have come gradually to understand that the liberal arts cliché about teaching you how to think is actually shorthand for a much deeper, more serious idea. Learning how to think really - means learning how to exercise some control over how and what you think. It means being conscious and aware enough to choose what you pay attention to and to choose how you construct meaning from experience. Because if you cannot exercise this kind of choice in adult life, you will be totally hosed."

<u>Youtube Video</u>: This is Water - Full version-David Foster Wallace Commencement Speech by Jamie Sullivan. (May 19, 2013)

Internal Motivation

The Endocrine System is setting the level for 'internal motivation.' The ability to manifest *doing* or *thinking* includes the need for a balanced set of chemicals being secreted and understood by that system. If you are lacking in anything or off-balance in your *Spin* you will not be able to perceive those imbalances directly This is why establishing best practices are important. Otherwise the system becomes a fractal puzzle of self-doubting-confusion, causing a person to get lost within themselves.

On the positive side, if our Human-System is well and properly balanced, 'motivation,' is just about focus, which comes down to self-discipline. Getting 'work' - a product for long term sustainability - out of the Human-System doesn't seem *hard* and with less *internal resistance - living and working* just occur with alacrity. This allows for another phenomenon to occur: excess pleasantness and calmness leak out. All the chemicals will leak out in some way, actually. This could look like '*happy*,' and our Human-System might smile, use open body language, becoming more easily entreated. Pleasant feels good – damn good - and others can sense it and like to be around it.

If our Human-Systems have become 'under-motivated,' 'work' is stressful as the internal-self is fighting itself. It doesn't need to be 'working' it needs to be self-caring!

Anyone having trouble imagining a teenager whining that they don't want to help with the dishes? This simple stress causes excess unpleasantness to leak out. We need the energy to maintain our self-discipline and fight draining distractions. There is a meme chart regarding the concept of "not having enough emotional spoons." This is about the number of emotional spoons it takes to complete a task with alacrity. We may put off a task but it is only to put ourselves into the proper mindset to get that task done properly a little later. The logic being, if you have to do meditation before you get the dishes done, do meditation so you get the dishes done. This is something all Human-Systems can leverage if they are wanting to be held accountable for their own self-improvement in the matter of having a good attitude about things that still must be done. After accepting dishes as a task, move on to laundry, and if needed, hygiene. Reminding others that it is about making yourself a little less gross, every day.

Motivation can come from outside our Human-System but also from within. From the beginning, I have mentioned the shortfalls that may occur in all our Human-Systems come from either a conscious or unconscious form of self-sabotage. The reality of the model I am presenting does require some amount of accountability be accepted by The Operator - The Being in charge of all the aspects of consciousness. Even for those exposed to horrible environments, what can be expected of people, will be expected of those people: what truth you have been giving, is the truth to which you are expected to live by. Granting that, all other systems having more exposure, knowledge, or wisdom about the plight of Human-Systems that are struggling, should be doing everything in their power to help them. The rehabilitation of our model is based on diversity and exposure to that diversity - in order to save ourselves, truly, as many as possible must also be saved.

Plato's Republic

In Plato's book <u>The Republic</u> (written 380 BCE), there is a section that has come to be known as the <u>Allegory of the Cave</u>. The analogy is of humanity and how people start off living with a dimmer perspective. If people are able to escape the chains that bind them to that perspective, they'll have access to escape to a reality that is fundamentally different than anything they have previously known, the world outside the cave. And after experiencing that freedom and new knowledge, people inevitably find themselves heading back into the cave in order to try and rescue others. I believe this further illustrates how our natures having evolved to incorporate this fundamental need: others.

Handling Feelings

Consider now The Dunning-Kruger Effect: you may suspect that many people are unaware that they have been sabotaging themselves or that they know they are really at a disadvantage to their peers. This inability to self-judge or gauge their own abilities does cause many of those same people to overly obligate themselves. Once a person's main source of energy is depleted, many can only see two options: The first to just bailing on the project; The second is for the person to hurt themselves in order to not

render disappointment in others. It just becomes harder for people in such actual *dire straights* to *physically* get out of them let alone *think* their way out.

There is also a concept that exists regarding people who cannot feel, are past-feeling, or can ignore their feelings. The terms thrown around by the media include words like **psychopath**, which by definition this would just be any person who was suffering from a 'mental disorder.' There is an inclination to villainize those that we assume are 'unfeeling' as it is an attempt to classify their *bizarre* behavior. There is the medical term, **Alexithymia** that is used by those who do suffer 'emotional blindness,' as explained in an article by David Robson (Aug. 2015) by the BBC.com called <u>What is it like to have never felt an emotion?</u> A person may not have *feelings*, either as a permeant condition or temporarily, but that has nothing to do with their ability to be a jerk, rude, or just a generally unpleasant person. The pipes of chemicals from the Endocrine System control the feelings but the ability to work through social situations is shared by the whole system.

Gaslighting

When dealing with others who are acting harmful, many times the topic of the conversation is diverted away from their behavior and becomes about something else. If a person isn't familiar with these language control and manipulation techniques, they will get sucked into a line of false logic. For instance, a conversation about the need to change behavior may morph into an attention-seeking plea. This dismissive gesture is a remnant from a set of behaviors in childhood and results from that child having ever learned to fail and start over. Instead, gaslighting and other verbal forms of manipulation are intended solely to maintain the status quo, at any cost. It's an unconscious reaction most of the time, at least until the internal wave of chemicals becomes enjoyable. With a lack of discipline, exposure and experience, a child will evolve their poor coping skills instead of strengthen a solid foundation.

Love Map

There are two main ways to gain information about the world but realize immediately, you really can't ever know someone or a location exactly; what you can do is continually add to your **Map of Understanding**. One option for Map-Making is by investing your own time thinking about something or someone. You may be internally motivated by a series of chemicals being called *love*, which does make thinking about someone other than yourself come easier, but that isn't always good. You can only project what another person might *want*, *like*, or *need* based on your own limited experience. "Love" can cause people to build delusions around another person if there isn't a system to check it such as 'strong couples-communication.' I call this method Building a Love Map. Not being able to love isn't a problem here, either. This work is also being accomplished by those persons who are able to respect another so much they are inspired; inspiration bringing them towards self-discipline and altruistic tendencies. Inspiration comes when you recognize that something exists outside of yourself, better than yourself, and it is the thing you need to focus your energies on.

Pain Map

You can only act on the knowledge you have so a Love Map is at least an authentic starting point but as we stated, you can make mistakes resulting in a type of feedback that is not pleasant but crucial: the boundary. Gaining a Pain Map not only opens up new levels of knowledge but it also expands and increases a persons 'point of view.' By gaining something *outside yourself*, that person becomes more than they previously were. This update can and may be painful but it is vital for personal growth and one of the main reasons the great philosopher Socrates (died 339 BCE) denounced capital punishment. In Greece during that time, the accepted ethical practice was 'help your friends' and 'harm your enemies.' Socrates stood out fiercely against this by stating publicly that the only moral purpose of inflicting 'pain' was for the rehabilitation of the soul. By hurting another person for any other reason, Socrates believed, would only result in wounds to one's own soul. You could take away a persons freedom, their home and comforts, and even their lives, but in all that pain, you would have never touched their core. (Bethany Hughes, Genius of the Ancient World, 2015, S1E2.)

Pain Maps are integral to our growth-process and imply that there is a benefit to learning how to handle rejection and maintaining a more even-tempered disposition in the face of correction. That correction is a trans-dimensional shift from one reality to another - it's another learning experience you could classify as heavy. There are many pitfalls that come from *vain imaginations* and poor maps are built and maintained creating some general Cognitive Dissonance we can all relate to. Their *Inverse Opposites*, Cognitive Realities, listed next.

Unpleasant/Arousing Cognitive Dissonances

What you believe... may not be real. <*Illusion* leading to *Delusional*>

How you behave... may not help. < Frustration leading to Aggression>

What you perceive... may not be complete. < *Incompetence* leading to *Repetitiousness*>

What you resolve... may not be accepted. < **Confoundedness** leading to **Inconceivability**>

What you desire... may not exist. < **Restriction** leading to **Corruption**>

What you feel... may be too much. < **Disruption** leading to **Devastation**>

What truth you absorb... may not be reciprocated. <*Unsanity* leading to *Insanity*>

Pleasant/Calming Cognitive Realities

What you believe... proves itself to be true. < **Prognostication**>

How you behave... has expected results. <Sustainability>

What you perceive... is complete. <**Wisdom>**

What you resolve... aligns with previous truth.

What you desire... is what is available to you. **<Contentment>**

What you feel.. is in alignment. <**Sublimation**>

What truth you absorb... gets to be manifested. **Bliss**>

Choosing Your Feelings or Cognitive Interface

This whole explanation is reminiscent to the Native American (Cherokee) legend of the Two Wolves. Roughly state, there are two animals at the center of every person, existing as either a good wolf or a bad wolf. The good or badness of a person therefore is destined to be the strongest wolf which strength is based on whichever one you feed. By allowing and internally-processing negative, destructive, illogical or impractical data points, the Central Core becomes more negative, destructive, illogical, or impractical. People become what they spend their time thinking about, whether they intend to or not.

The Five Love Languages

We currently live in a society with members of the population believing that *feelings* are not controllable. They are only victims to their *feelings* and instead of controlling themselves and their thoughts, they get to inflict others. Gary Chapman is

the author of the series <u>The Five Love Languages</u> which properly explains that the idea of Love needs to be considered from the point of view of the Receiver, not the Giver. What a persons private feelings are, are their feelings. Feelings are used to motivate Givers to perform acts which will be interpreted by a Receiver as a pleasant and calming reality. Receivers also have no responsibility in performing an act that the Giver is expecting, either. If a person does need something, they should ask for not, not trade. Trade is secretly a Master/Slave model as contracts define separating obligations not a shared responsibility.

If you look at the language of the bronze age pictographic users, an early word in Paleo-Hebrew for *love* was the word *Ahava(h)*. (Youtube link to linguistic source) It was represented by three pictures: an Ox, a man-waving, and a house - which breaks down in meaning: strength looking towards the house. Even early on in the thinking of early hominids, *Love* was perceived as a strength directed back towards the group. Wordstudy is interesting as you get to learn about another culture. Here's another video about the same word to see other ways it was used. (Youtube link.)

Youtube Video: History of Ideas: Love by The School of Life. (August 17, 2015)

Fear

What is fear if just a lack of experience, motivation, and intention. Previous ethical debates did not give a clear foundation for ideas on why people should be treated equally and Fear was a reasonable tool. Being fearful isn't seen as a state given to people, but a natural state they are found in. This is false and will hopefully begin to be seen as a dismissive gesture to protect a false reality. What reality is that? That Master/Slave is stronger for communication then Cooperation. That is not what this model shows and the use of fear should be viewed from this reference frame.

Some Masters of the Master/Slave model believe they are entitled to their mastership and will not lobby to make changes to a model that doesn't place them at the top. Indeed, they will work against. Wealthy-masters wanting to influence elections are doing so thinking they are doing what is right. Some wealthy-masters influence elections doing so thinking to over throw the status quo into utter chaos. Their desire is manifesting as the need for government control over the masses and no control over corporations. Society has had to wait over the years because just like Racism didn't just go away, general inequality became harder to draw lines around. Fear is everywhere in our society, dividing us and keeping us from coming together.

Direct Action

With the lack of gun control laws in the US exacerbating gun violence against the masses, eventually fear of public assembly may override people's desire for public rallies against the government. Yes, there are movements that may occur at home but the power of the people to put fear back into their government is in their physical presence not in poling numbers. People are only numbers on paper until you have to

considering arresting them and paying to feed and house them. Historically, the need for changes made to address the injustices done to those less fortunate have come by a group-process known as <u>Direct Action</u>. And it comes to us highly recommended.

If any reader isn't familiar with the never ending struggles of average Americans since even before the founding of the nation, as they strove to bring fair treatment and practices, it is suggested that they read Howard Zinn's book, A People's History of the United States. It is a good start in learning about where Human Right's in America have come from. They didn't come from corporations or from the US government but from the Direct Action and uprising of its citizens when the common people were brought to the rational understanding of their mistreatment. Historically, the term War Hawks refers to people to who love war and this common quote of Dr. Martin Luther King Jr is often updated as:

"Those who love peace must learn to organize as effectively as 'those who love war."

Bully's

The biggest tool used against those would-be-Masters to their potential Slaves is fear. The theory behind a Master is that they are powerful, offer safety, have special knowledge, or even abilities. Masters are assumed to never submit their slaves to anything that would not otherwise be to their benefit. The Slaves are left to lack a reference frame in which to properly judge actions and behaviors. It is like they are left as children. In an ideal situation, it might be assumed to be a free-ride except there is always a catch. All the needs are taken care of as long as you don't think too much about how they were achieved and if they are really the right fit for you. Therein lies the problem, Human Masters can't already know everything let enough to make all the best decisions for a themselves let along a group of people. This makes any potential Master just a Bully: a weak minded individual who is no longer able to communicate their truth but feels entitled to the microphone.

Bully's know that fear can be brought upon someone by just a surprise or shock, anything that is out of character or chaotic. That isn't hard. It is harder to be in alignment and produce something that is symmetrically or predictable. Once a rational mind is able to internally-process a series of events, it doesn't fear them. Being forced to act outside of already known operating parameters isn't awesome but failure being an option means it is going to happen. This is what it means to grow. Human-Systems should therefore learn to be adaptable in order to be able to learn. It is a skill that can be learned which means fear is a temporary condition that may be overcome with exposure, experience, and intentionality. Another word for this is practice.

Youtube Video: History of Ideas - Failure by The School of Life. (December 25, 2015)

In a book series by science fiction author <u>Frank Herbert</u> (1920-1986), the topic of getting over fear is so prevalent that the main character, Paul Atreides, constantly refers back to the same mantra:

"I must not fear. Fear is the mind-killer. Fear is the little-death that brings total obliteration. I will face my fear. I will permit it to pass over me and through me. And when it has gone past I will turn the inner eye to see its path. Where the fear has gone there will be nothing. Only I will remain."

Getting over fear and being able to live your truth is a common thread of thought for most people in America. It is not easy to do and the reason why the Master/Slave model is brought back as a constant fall back option for some. An entertaining perspective about this concept may be found in 1991 movie Defending You Life, written and directed by Albert Brooks and starring Meryl Streep. The focus of the story takes place in an after life where the main character must defend his fear based life while he is falling for someone who is fearless.

How to Spot a Liar

When it comes to communication, learning and knowing how to trust others in your community is very important. Currently, our society accepts lying and weak communication skills despite the inevitable troubles such a lack of disciplines causes. The CEO of Simpatico Networks, Pamela Meyers, oversaw a review of deception data and research and published a book about the 'deception pandemic' in her book Liespotting. She also has a TED talk called How to Spot a Liar. Human behaviors follow known patterns and learning these patterns were previously one of the few ways of knowing if someone was lying. The other way was to have the truth.

The Geometric Primer gives humanity a new way to judge truth other than relying upon trusting another person blindly or learning all the different variations of body language. People make mistakes all the time so it is not always apparent even then if someone's behavior is malicious or not. Human's lie and Human's are susceptible to believing in lies - this isn't a good combination. Any universal truth offered to the community would be aligned with the Geometric Primer and allow that person to identify truth anywhere.

Designing a Modern Utopia

The Venus Project

Dreaming about the future is a career path that many take upon themselves. Ideas regarding a sustainable utopian future have been long in development and planning. Cities need engineering and structure, planning and resource management. There are many futurist that could be spotlighted but one that is quoted in this paper is

<u>Jacque Fresco</u> (1916 - 2017) with labs out of Venus, Florida. While Mr. Fresco passed away in 2017 his legacy and work regarding sustainable building methods and communities are still made available to the public today. If any reader has trouble imagining how a utopian community would combine nature and technology, his documentary <u>Future by Design</u> is a great start.

Purpose of Government

What is the purpose of a government? In a democratic republic, it is supposed to be an institution of the people that supports the people as a collective unit. Many hate the ideas of socialism but strictly speaking, socialism isn't supporting enough for this model. Coupled with capitalism, which in itself has no moral code, the manifestation of the Master/Slave model makes innocent victims of billions while entitling a few. The structures required to support family, child-rearing, rehabilitation, and sustainable growth are only found in altruistic models, not selfish or product driven ones.

Modern technology, though, does give us the opportunity while individual corruption gives us the need to evolve a computer-structured government. An organic governing body is obsolete as politicians can easily be replaced with online voting systems, financial lock-boxes, and credit-rating system on contractors in charge of public works.

Representation of the people, by the people, was only done because people were the ones that went and physically voted on behalf of their constituents. It was also generally believed and even taught in political science classes into the modern century that the masses must be considered *stupid*. Individuals could be thought of as smart but not a group. This is a current serious information infection being taught to political science majors. It was believed that a mob mentality would over take people and cause rational people to act irrational. This idea is false as rational people will act as rational as the rationale you give them.

Block Chain

A proxy voting system is more easily implemented wide spread if it was automated. The Government would therefore be less staffed with politicians but with IT Professionals. Block Chain technology and Block Chain based internet network structure would allow for votes to be cast privately through publicly stored encryption protocols. This technology is still being developed but is very promising.

Empty-Account ID

How does a government connect real people to online accounts safely? That is a good question and something that has already been worked on by others. Issued could be something called an Empty-Account ID. This would be a piece of paper with an encryption code on it that a real person would have to go pick up at a physical location.

Specifically, the one nearest them. This code would unlock an Empty Account for that person to make active. The Empty-Account ID would be specific to that person's voting location and even if they didn't put in their address, citizens would get notifications for all the ascending levels of government that needed their attention.

Gerrymandering

For all the effort currently that goes into voting that occurs just to get people elected, this model has already shown itself to be inefficient. How so? Historically, gerrymandering. The issues are currently still being fought in US courts where districts have been shown to have been improperly misrepresenting minority populations for decades. The value of an individual's personal vote is diluted as their priority is enslaved by other needs thinking they are more masterful. Most of the voting that occurs is for the appropriation of funds or direct money, anyways. A secure voting system just cleans up this whole process.

Escaping Poverty

Just in this basic explanation, a Human-System would be a challenge to take on, and yet we *Spin* off copies of ourselves and ideas as if we have reached perfect alignment already. In order for the most authentic level of happiness to be created and established by a Human-System so many things have to go 'Right.'

Peter Temin, an economist with MIT, published a book in March of 2017 called The Vanishing Middle Class. In his book, Temin goes on to describe the length of time and the challenges it takes for a person to escape from poverty: If everything goes perfect - twenty years! It is no wonder that people have become completely demoralized living in an environment that requires twenty years of zero chaos, accidents or misjudgments in order to escape poor circumstances and be considered a person deserving of respect. It isn't possible when most people are starting out with so many things stacked against them.

Guaranteed Income

With an online voting system and structured government, there is no need for a physical currency. And eCurrencies are more recognized now if not properly understood. Currency regulation, instead of being tied to the untested opinion of a few biased scholars, could become a calculation of the cost to distribute goods based on total population needs. If this is done with computers, this cost could be calculated constantly and accurately.

Sexual Equality

Ideally, no one would be sexualized without their permission. In modern society, there is an active movement to change the former standards that consisted of the

constant sexualization of women to one that is: Never without my permission. Historically, the accepted roles for Woman were two-fold: become prudy-wives or shamed whores while men had no such restrictions and would lay claim to even sexual dominance.

Sexual relations should be a deeper exploration of the bonds between people, evolving connections and shared universes of pleasure. These paths are tender and should only be tread willingly, without coercion. All sexual relations should be consider reverent, joyful, private, and divine. While science does have some standards for waiting till later in life to start ones sexual journey, it is also good to note that the ability of both people to communicate their inner reality is just as crucial a journey that shouldn't be ignored. Human-Systems can not fornicate their way to happiness and empowerment, it must be established within themselves first.

In our modern world, this type of experience is taken for granted and many need assistance in transitioning their mental and physical relationships to more sustainable practices. A good start is to seek help and guidance such as can be found in the free seminars and <u>TED talks</u> posted online by <u>Esther Perel</u>, a Belgian psychotherapist. <u>Perel's Website</u>

Human Sexuality

Human Sexuality has long been a complicated subject but the *Inverse* and *Opposite* model does indicate that there should be a spectrum of gender represented. It isn't just male and female. This means straight, gay, lesbian, binary, trans, queer, all of it, exists as a part of the same pattern/program. Not just that, but those experiencing a transition-state of gender represent those dimensions of transition, the 2nd-Dimension and the 5th-Dimension.

And God Made the Transgender

Gender, in a spiritual sense, is therefore fluid. If men may become women and women may become men, to a being of a higher order such as God, gender wouldn't mean anything. Instead, that God would require them in the system if that system were to truly manifest the underlying universal pattern/program.

Pedofilia

It needs correcting in society exactly what Pedofilia is and how it is treated. There are some that believe Pedofiles are suffering from a 'sexual orientation' so they accept it as natural, a conclusion which is false. Instead, it needs to be understood that Pedofilia is a mental and physical disorder relating to a sexual response that occurs due to a Master/Slave relationship manifesting as adult to child. It is illogical to cross that barrier in so doing is an intolerable corruption of the pattern/program and offense against evolution. Therefore it is imperative that there be a distinguishing line between

something that is an accurate manifestation of the pattern/program and a corruption of it. Sexual orientation is just were that person genetically is within the same dimension as another person of appropriate maturity. This relationship is always cooperative, it is never Master/Slave.

That being said, there are a few other things to add about Pedofiles. There needs to be understood to be two groups: Offending and Non-Offending. For Non-Offending Pedofiles a support structure needs to be offered. There isn't a group or organization that can go public for such treatments and getting patient support is spotty, at best. Few specialize in these cases and much of the resources are diverted towards treating Offending Pedofiles. Otherwise, patients who don't have the ability to be abstinent may begin to rely upon self-medication in the form of legal child porn, ie. written-word sharing websites and their imaginations. Patients, instead, need a safe place in potentially a sexually neutral environment for rehabilitation meaning they might be offered to live and work in Adult-Only communities.

Supporting Family

Sleep

Suggestions for Applied Testing

To further test accessibility of this model this paper suggests attempting the following: A Non-Invasive Testing Procedure for Coma Patients. This idea is inspired from the records from patients that have woken up after coma's and their description of the experience. Many mention being able to hear and just process or respond. In light

Theory Behind Applied Testing

The theoretical basis for this idea is that a person who is in a coma has their mental-self disconnected for their physical-self aspect The Physical Body. Patients who wake from coma's even remember things about past events - they were just not able to respond. The fractal nature of our human-system as a model should open a passageway into the *Inverse* and *Opposite* reality that is occurring inside coma patients and give that dormant system a chance to reboot.

Set-up For Testing

Creating an Artificial Bio-Mechanical Feedback Supporting Apparatus

- I. Recreating Physical Stimulus: Requiring 4-6 Volunteers
 - **A.** Positioned at each limb, have them gently maneuver "their limb" from the large socket down to the lower extremity, in a gently parabolic wave form. Releasing the limb afterward back to a resting position.
- II. Recreating Audio Stimulus from Familiar Voice: "Yummmm." *Crackle of wrapper*
 - **A.** Suggest recordings of loved ones or old friends make a mix tape of the sounds of them enjoying something sweet or delicious.
 - **B.** Employ surround system, varying:
 - Pitch & Loudness creating deterministic feature for measuring distance
 - 2. Timbre creating excitement/energy
 - **3.** Push for familiarity activating memory protocol's using many variables that might stimulate the patient by hearing.
- **III.** Recreating Increased Stimulus: Sugar water dropped on tongue; aerosolized terpenes; a cool breeze; changing light source:
 - **A.** Use a sugar/water mixture that is sweet enough to be detected but not so much that the patient is put at caloric/blood-sugar risk from the implementation.
 - **B.** Adding the use of terpenes, such as those in oranges peels, leaves like peppermint and basil or straight essential oils, may be added BUT check personal history to look for cases in which terpenes are related to an avoidance program (i.e. they are known to not like them.)
 - **C.** Have a fan ready to make a directional breeze, in order to push aromas into the face of the patient. (Get the hair to move a little.)
 - **D.** Adjust the lighting to cozy: Day-Time [shine a light]; Lights out, dim room.
 - E. Approved micro-dose injection of dopamine or serotonin.

Implementation Standards and Best Practices

Implementation Techniques

- I. Create proper atmosphere (dim lights, quiet hallways)
- II. Stage Environment with rehearsed volunteers and needed equipment
- III. Gently Wake, Saying the Patient's Name, "Jane?" and "Ready to Internally-Process a Program?" as apart of the ceremony to begin.
- IV. Having personalized the experience as much as possible to each patient wherever possible, perform each cycle with complete respect. All must be silent and diligently attentive to each other minimize all possible interference the team must become the efficient program another mind may mimic.
- V. Repeat Series over numerous days: look for quantitative reactions or have the team suggest slight environmental adjustments for the settings of each personal Program Series.
- VI. Ongoing, all patients being treated should be talked to as if they are "disconnected" but "indeed, present": (You would not intrude on a sleeping

person if they woke, you wake them gently.) The attending daily support team should be specifically trained to turn their "procedures" into a rich narrative, with a ceremony that includes pauses for needed silences as an invited-space for recognition to take place. The Team should clearly and naturally narrate their actions with inflictions and personality, moving intentionally about their tasks - taking short pauses after reporting changes and descriptions of what they, The Team member, are performing upon them, for them, and around them. The Team should strive to report on the dimensions and characteristic, submitting data points like a tease to the dormant programmer, but respecting the awareness of the central core by giving the patient a specified time to [potentially] turn an open process into a **HALTED** program.

- VII. The Supporting Team works to manually stimulate "The Programmer" by feeding data points sequentially through programs, trying to "spark a spark" or ignite a data signal (DEMAND / ANSWER RELAY) to the Central Core which the Central Core. Daily treatments become ceremonies that project this reality onto their central core by offering a scattering of data points to perhaps ignite a "Programmer" sequence.
- **VIII.** Use an EEG to take measurements of brainwaves before, during, immediately after, following sleep-cycles, after waiting two to four days, and intermittently, as you increase frequency, duration, and saturation of an external vector reality.

Implementation Instructions

Instructional Series

1.) Physical Body Feedback Protocol: Recreating the idea of moving.

[Create a single parabolic "Wave," with each limb and then releases.]

Recorded sound of "door opening and closing."

2.) Super Ego Feedback Protocol: Using Patient's Personal Soundtrack.

"Surprise!" "Happy Birthday!"
[Noises: Crackling Wrapper, party horn]

3.) Intellect Feedback Protocol: Check Patient Response.

[Team relaxes and looks for changes in the body.]

[PAUSE IN ACTIONS: BE SILENT AND STILL]

(Check for signs of "Thinking" / "Awareness" at this stage.)

4.) Id Feedback Protocol: Using Taste/Olfaction Stimulation.

[Drop of Water/Sugar water on the tongue.]

[Triggering smell blown in their face.]

5.) Endocrine Feedback Protocol that mimics taste stimulation.

[Injection of dopamine or serotonin]

6.) Check for "Ego" Feedback Response.

[Team relaxes and looks for changes in the body.]

[PAUSE IN ACTIONS: BE SILENT AND STILL]

(Check for signs of "Needing" / "Arousal" at this stage.)

7.) Repeat.